MITIGATED NEGATIVE DECLARATION

PROJECT: **LAGUNA POINT BOARDWALK RECONSTRUCTION PROJECT**
MACKERRICHER STATE PARK
MENDOCINO COUNTY, CALIFORNIA

LEAD AGENCY: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS: A copy of the Mitigated Negative Declaration for this proposed project is available for review at:

Mendocino District Headquarters
California Department of Parks & Recreation
Russian Gulch State Park
State Route 1
Mendocino, California 95460

MacKerricher State Park Visitor Center
24100 MacKerricher Road
Fort Bragg, California 95437

Mendocino County Library, Fort Bragg Branch
499 Laurel Street
Fort Bragg, California 95437

Northern Service Center
California Department of Parks & Recreation
One Capital Mall – Suite 410
Sacramento, California 95814

California State Parks Internet Site
http://www.parks.ca.gov/default.asp?page_id=980

PROJECT DESCRIPTION:

The Department of Parks and Recreation (California State Parks) proposes to remove and replace the majority of an existing pedestrian boardwalk at Laguna Point in the day use area of MacKerricher State Park near Mill Creek Road and Haul Road (Coastal Trail) in order to meet Americans with Disabilities Act (ADA) standards and prevent erosion. The project would also remove or repair boardwalk observation decks, provide ADA accessible parking, and reconstruct the entryway to the boardwalk.

A copy of the Initial Study is incorporated into this document. Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Gail Sevrens, Environmental Coordinator
California Department of Parks & Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, CA 95814
FAX: (916) 445-9100
Email: gsevr@parks.ca.gov

Submissions must be postmarked or received by fax no later than May 6, 2005.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Final Mitigated Negative Declaration.

(Signature on file) ___ ___
Michael Wells Date
District Superintendent
Mendocino District

_____ _____
Gail Sevrens, Environmental Coordinator Date
Northern Service Center

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Laguna Point Boardwalk Reconstruction Project at MacKerricher State Park, Mendocino County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq*., and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq*.

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the proponent mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines §15071.

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for specific project information is:

Peter Braudrick
California Department of Parks and Recreation
Mendocino District
P.O. Box 440
Mendocino, California 95460
Phone: 707-937-3118

All inquiries regarding environmental compliance for this project, including comments on this Initial Study/Mitigated Negative Declaration, should be submitted in writing to:

Gail Sevrens, Environmental Coordinator
California Department of Parks and Recreation
Northern Service Center
One Capital Mall - Suite 500
Sacramento, California 95814
Fax: 916-445-9100

All comments regarding this environmental document must be in writing and may be submitted by regular mail to the address or fax number indicated above. Submissions must be postmarked or received by fax no later than May 6, 2005. The originals of any faxed document must be received by regular mail within ten working days following the deadline for comments, along with proof of successful fax transmission during the designated comment period.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed Laguna Point Boardwalk Reconstruction Project at MacKerricher State Park. Mitigation measures have been incorporated into the project to avoid any potentially significant impacts or reduce them to a less than significant level.

This document is organized as follows:

Chapter 1 - Introduction.
This chapter provides an introduction to the project and describes the purpose and organization of this document.

Chapter 2 - Project Description.
This chapter describes the reasons for the project, scope of the project, and project objectives.

Chapter 3 - Environmental Setting, Impacts, and Mitigation Measures.
This chapter explains the environmental setting for each environmental issue, evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist, and identifies the significance of the potential impacts. Mitigation measures are incorporated, where appropriate, to avoid any potentially significant impacts or reduce them to a less than significant level.

Chapter 4 - Mandatory Findings of Significance

This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impacts to humans, as identified in Chapter 3.

Chapter 5 - Summary of Mitigation Measures.

This chapter summarizes the mitigation measures incorporated into the project, as indicated in Chapter 3.

Chapter 6 - References.

This chapter identifies the references and sources used in the preparation of this IS/MND.

Chapter 7 - Report Preparation

This chapter provides a list of those involved in the preparation of this document.

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project. Based on the IS and supporting environmental analysis provided in this document, the proposed Laguna Point Boardwalk Reconstruction Project would result in less than significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In accordance with §15064(f) of the CEQA Guidelines, an MND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of mitigation measures, the proposed project would have a significant effect on the environment. DPR proposes to adopt a Mitigated Negative Declaration, in accordance with the CEQA Guidelines.

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CHAPTER 2
PROJECT DESCRIPTION

2.1 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Laguna Point Boardwalk Reconstruction Project at MacKerricher State Park (SP). The proposed project would remove and replace the majority of an existing pedestrian boardwalk at Laguna Point in order to meet Americans with Disabilities Act (ADA) standards and prevent erosion. The project would also remove or repair boardwalk observation decks, provide ADA accessible parking, and reconstruct the entryway to the boardwalk.

2.2 PROJECT LOCATION

MacKerricher SP is located on the Pacific coast, in a moderately developed part of Mendocino County, immediately north of the city of Fort Bragg. The Laguna Point boardwalk is in the day use area of MacKerricher State Park near Mill Creek Road and Haul Road (Coastal Trail). The boardwalk proceeds south from the day use parking lot about one-quarter mile, parallel to the coastline. Visitors to MacKerricher SP enjoy recreational activities that include walking, beachcombing, bicycling, sightseeing, bird-watching, surfing, camping, and abalone diving. More than one half million people visit the park every year.

2.3 BACKGROUND AND NEED FOR THE PROJECT

Built by the Telephone Pioneers volunteer group in 1985, the Laguna Point boardwalk does not meet current ADA standards for access. Additionally, there is no ADA-compliant path of travel to the boardwalk from the parking lot, and no ADA-compliant parking is provided. Since the original construction of the boardwalk and its accompanying observation decks, the footings for some of these decks have eroded, and require removal or repair. Finally, in the absence of signage, pedestrians often leave the boardwalk and walk in sensitive areas, leading to erosion and damage of native vegetation.

2.4 PROJECT OBJECTIVES

The objectives related to this proposed project center primarily on providing access and protecting natural and cultural resources. These include:

- Making the boardwalk and its entryway and associated parking compliant with ADA standards.
- Preventing erosion by encouraging visitors to remain on the boardwalk and not on fragile soil.
- Protecting natural and cultural resources by encouraging visitors to remain on the boardwalk.

The proposed project, as outlined above, would further the Department's mission by:

- Preserving and protecting significant natural and cultural sites, features, and structures.
- Improving the quality of life in California by increasing the diversity and availability of high quality recreational experiences and opportunities.

2.5 PROJECT DESCRIPTION

Remove and replace the majority of an existing pedestrian boardwalk at Laguna Point in the day use area of MacKerricher State Park near Mill Creek Road and Haul Road (Coastal Trail). Remove or repair boardwalk observation decks. Provide accessible parking and reconstruct entryway to the boardwalk.

Boardwalk

The existing Laguna Point boardwalk is constructed of 2" by 6" redwood decking along with the support stringers and pier blocks. It proceeds southward from the day use parking lot and splits into two sections, which meet together near the end of the boardwalk. The total length of boardwalk is almost one-half mile.

This project will remove and replace all but the southernmost 240 feet of the boardwalk. The reconstructed boardwalk will closely follow its current alignment, but will be widened to six feet to meet ADA standards. The new alignment, including the extra width, will be set to avoid sensitive vegetation. The portion to be replaced measures approximately 2,338'. The boardwalk will be constructed as close to the ground as possible to preclude the need in most areas for handrails. Four-inch by four-inch lumber will be placed on either edge of the boardwalk to act as a curb.

No posts will be sunk into the ground in any of the construction. All of the construction of the boardwalk will be sited on pier blocks to preclude ground to earth contact. Ground disturbance will be kept to approximately two inches with the pier blocks set on the surface and leveled.

Signs and interpretive panels will be mounted to the boardwalk to encourage pedestrians to refrain from leaving the boardwalk, as such foot traffic could harm sensitive vegetation or lead to erosion.

Boardwalk Observation Decks

The boardwalk was originally constructed with five observation decks. The northernmost observation deck on the boardwalk was undermined by erosion and previously removed. The second observation deck, proceeding southward, has also been undermined by erosion, and will be removed. The third observation deck will be repaired. The fourth deck will have its benches rebuilt to meet ADA guidelines.

Boardwalk Entry Area

The entrance to the boardwalk will be constructed of concrete and have a 5% grade to bring people up to the boardwalk. The concrete will be tinted an earth tone to match the surrounding soils. Existing bike racks will be moved slightly.

Work in the entry area will include removing existing wood boardwalk entry and associated structures; sawcutting existing asphalt paving and removing down to native soil, with earth generated during demolition or construction to be potentially used on site; adding soil materials to build surfaces to meet desired finished grades; removing vegetation, debris, and unsatisfactory soil materials from the ground surface prior to placement of fills; scarifying existing surface so fill material will bond with the existing surface; constructing a wood soil dam from 3" x 3" redwood, installing a concrete catch basin at finished grade; sawcutting pavement and installing 157 linear feet of 10" ABS rigid drain pipe; and connecting a new drain to the existing inlet box. The concrete path will be constructed on compacted earth subgrade, with compacted backfill graded to drain away from concrete.

Parking Area

Restripe west end of the existing asphalt day use parking area to provide three van-accessible parking spaces meeting ADA standards. Provide signage and accessible path of travel to the boardwalk entry.

2.6 PROJECT IMPLEMENTATION

Construction for this project is expected to take three months to complete. However, unfavorable conditions, such as inclement weather, could cause delays. The site would remain closed to the public during approximately 10 percent of the construction period. Work would generally occur between 7 a.m. and 5 p.m. on weekdays only, except as necessary to address emergencies or other unforeseen conditions.

Construction materials will be moved to the site by hand and using nonmotorized carts, traveling on the boardwalk. Equipment required for construction of the entrance to the boardwalk will be limited to the existing parking lot. Most construction will be done with hand tools. The staging area for the project would be in an existing shop area approximately 0.5 mile from the project site.

2.7 VISITATION TO MACKERRICHER STATE PARK

Visitor surveys conducted over the last few years indicate the following level of visitation at MacKerricher SP:

July 2000	48,652 visitors/vehicle	8,755 visitors/non-vehicle
July 2001	70,314 visitors/vehicle	9,413 visitors/non-vehicle
July 2002	56,138 visitors/vehicle	6,724 visitors/non-vehicle

2.8 CONSISTENCY WITH LOCAL PLANS AND POLICIES

The proposed Laguna Point Boardwalk Reconstruction Project at MacKerricher SP is consistent with local plans and policies currently in effect, including the *Mendocino County General Plan Update* (Mendocino County Planning and Building Department

2002) and the *MacKerricher State Park General Plan* (DPR 1995). The park's General Plan (GP) called for widening the boardwalk and redesigning the boardwalk entrance (Facilities Element, pp. 156-157).

2.9 DISCRETIONARY APPROVALS

DPR has approval authority for implementation of projects within the boundaries of MacKerricher SP, including the proposed Laguna Point Boardwalk Reconstruction Project. Consultation with and/or permits from the County of Sonoma (Coastal Development Permit), United States Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (DFG) may be necessary.

2.10 RELATED PROJECTS

DPR often has other maintenance programs and rehabilitation projects planned, on-going, or recently completed in the same vicinity as a proposed project. For MacKerricher SP, these include:

- Pudding Creek Bicycle Boardwalk – DPR is planning the construction of a 150-foot-long boardwalk, to connect the Trail Access parking area with the South MacKerricher Coastal Trail, on the northeast side of the Pudding Creek Trestle. The boardwalk will prevent further degradation of an archaeological site from pedestrians and bicyclists currently using a long-standing "volunteer" trail. It will also eliminate the hazards associated with a Caltrans drainage ditch and culvert, by bridging the ditch at a gentler grade. The boardwalk will be ADA compliant.
- Pudding Creek Trestle – The historic Pudding Creek Trestle is located within the Park approximately three miles south of Laguna Point. DPR is planning to rehabilitate the trestle, including the installation of decking and safety railings to accommodate public access onto the trestle deck, and open the trestle to the public. When opened, the trestle will be accessible to pedestrians and bicyclists from the City of Fort Bragg and the South MacKerricher Coastal Trail (Haul Road). DPR has prepared a mitigated negative declaration for this project, State Clearinghouse #2003102051, and filed a Notice of Determination with the State Clearinghouse on November 14, 2003.
- Snowy Plover Recovery Program -- Development and implementation of a Snowy Plover Recovery Program is currently underway in MacKerricher SP. No snowy plover management units exist in the area of the proposed Laguna Point boardwalk project. Current management measures of the recovery program include "exclosure" fencing, biological monitoring, and elimination of invasive plants. Elimination of domestic animal access is an ongoing effort which USFWS intends to expand. Additional proposed management efforts include reducing trespass by humans and horses, protecting nests with additional "exclosure" fencing, increasing public education, adding signage, and enforcement of existing restrictions.
- Acquisition of Glass Beach – DPR has recently acquired Glass Beach, a 38-acre, industrially-zoned property along the Fort Bragg coastline, just south of the Pudding Creek Trestle (DPR filed an NOE on this acquisition on November 6, 2002, State Clearinghouse #2002118097). Glass Beach has been incorporated into

MacKerricher SP. A request to the City of Fort Bragg for re-zoning of Glass Beach is currently pending.

- Lake Cleone Water Treatment – DPR has proposed upgrading an existing drinking water treatment facility at the shop yard and Lake Cleone, approximately one-half mile north of the Laguna Point boardwalk entrance. Funding has not yet been secured, and any work on that project would not begin until the second half of 2006 at the earliest.
- Howell's Spineflower Recolonization Study – This project, funded by the U. S. Fish and Wildlife Service, involves the removal of the nonnative groundcover plant *Carpobrotus edulis* (iceplant; Hottentot-fig) from 25 50-square-meter plots from just north of Lake Cleone to approximately one-quarter mile north of the Ward Avenue park access. Study plots are located in either coastal prairie or dunes. State Parks resources crews are removing iceplant to investigate the potential for recolonization by *Chorizanthe howellii* (Howell's spineflower), a federally endangered annual plant. The study will be ongoing through at least spring 2007.

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CHAPTER 3
ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1.	Project Title:	Laguna Point Boardwalk Reconstruction Project
2.	Lead Agency Name & Address:	California Department of Parks and Recreation
3.	Contact Person & Phone Number:	Peter Braudrick (Project Manager) (707) 937-3118
4.	Project Location:	MacKerricher State Park Mendocino County, California
5.	Project Sponsor Name & Address:	California Department of Parks and Recreation Acquisition and Development Northern Service Center One Capital Mall - Suite 500 Sacramento, California 95814
6.	General Plan Designation:	High Use Intensity/Development/Low Use Intensity Kerricher State Park General Plan (June 1995)
7.	Zoning:	Open Space (Mendocino County GP, 1981)
8.	Description of Project:	Refer to Chapter 2, Section 2.5
9.	Surrounding Land Uses & Setting:	Refer to Chapter 3 of this document (Section IX, Land Use Planning)
10.	Approval Required from Other Public Agencies	Refer to Chapter 2, Section 2.8

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact", as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	☒ None

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that, although the original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. A **MITIGATED NEGATIVE DECLARATION WILL** be prepared. ☒

I find that the proposed project **MAY** have a significant effect on the environment and an **ENVIRONMENTAL IMPACT REPORT** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐

_____ ____ _____

Gail Sevrens, Environmental Coordinator Date

DPR - Northern Service Center

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.

4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:

   a) Identify the earlier analysis and state where it is available for review.

   b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.

   c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.

6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.

7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.

8. Explanation(s) of each issue should identify:
   a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
   the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

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ENVIRONMENTAL ISSUES

I. AESTHETICS.

ENVIRONMENTAL SETTING

MacKerricher State Park is located along the coast in a relatively rural area of Mendocino County. As noted in the Park's General Plan, the scenic beauty of the area is one of the primary draws for visitors to the area. The Laguna Point boardwalk originates in the parking area near the Main Beach of MacKerricher State Park, and wends its way along the bluffs of the Pacific Ocean, providing spectacular vistas from both the boardwalk and its overlook areas. The boardwalk loops around to rejoin itself before returning to the parking lot. Other views from the boardwalk include trees and open grassland. The highway is not visible from the boardwalk.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a) Once completed, the work proposed as part of this project would enhance the appearance of the boardwalk by reconstructing dilapidated areas of the structure, but have little impact on overall scenic vistas in the area. Interpretive panels and regulatory signs would be mounted in as much as an unobtrusive manner as possible, in order to prevent blockage of views. The presence of construction equipment and any temporary fences restricting access during construction would present a limited, temporary adverse visual impact to those viewing the boardwalk from any nearby location. However, no scenic ocean views or access to viewing areas would be permanently blocked or restricted and there would be no long-term impact to the existing scenic vista. Additionally, Park visitors would have the option of experiencing numerous other scenic views from within and near the Park during construction. Therefore, the project would have a less than significant impact.

b) State Route 1, the Pacific Coast Highway, has been determined to be eligible to be designated a State Scenic Highway in this portion of Mendocino County, but has not been so designated. The project site is not visible from the highway. No impact.

c) See Discussion I (a) above. As with any construction project, there would be some temporary decrease in the visual appeal of the area immediately affected by the work being performed. However, the duration of the work would be limited and visual impacts would be overshadowed by the aesthetic improvements and protection of the resource that would result. There would be no permanent or long-term degradation of the visual character of the site or its surroundings as a result of this project. Therefore, the impact from this project would be less than significant.

d) Lighting is not an element of this project and no new light sources would be introduced into the landscape. All construction work would be limited to daylight hours, eliminating the need for work lights. No impact.

II. AGRICULTURAL RESOURCES.

ENVIRONMENTAL SETTING

The proposed project area contains no lands zoned for agriculture or in agricultural use. None of the land within or immediately surrounding MacKerricher SP, or the area impacted by the proposed project, is included in any of the Important Farmland categories, as delineated by the California Department of Conservation, under the Farmland Mapping and Monitoring Program (FMMP).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

DISCUSSION

a-c) As noted in the Environmental Setting above, MacKerricher SP does not support any agricultural operations. All work proposed as part of this project would be confined within park boundaries. No land adjoining the park is zoned as agricultural land or used for agricultural purposes, as defined by the United States Department of Agriculture land inventory and monitoring criteria (modified for California). The boardwalk reconstruction would not cause the conversion of any prime, unique or important farmlands. Therefore, this project would have no effect on any category of California Farmland, conflict with any existing zoning for agricultural use or Williamson Act contract, or result in the conversion of farmland to non-agricultural use. No impact.

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III. AIR QUALITY.

ENVIRONMENTAL SETTING

MacKerricher SP is in Mendocino County, which is part of the North Coast Air Basin (Basin), the North Coast Unified Air Quality Management District (NCAQMD), and the U.S. Environmental Protection Agency Region IX. Ocean winds, moderate levels of highway traffic, and a small industrial base result in relatively clean air in the vicinity of the park. According to NCAQMD, the entirety of the Basin has been designated as in "attainment" or unclassified for all criteria pollutants. An area is designated in attainment if the state standard for the specified pollutant was not violated at any site during a three-year period.

However, the Basin is in "non-attainment" for the state standard for particulate matter (PM_{10} or particles with an aerodynamic diameter of 10 microns or less), but does not exceed the federal standard. An area is designated in non-attainment if there was at least one violation of a state standard for the specified pollutant within the area boundaries.

The District is currently unclassified for visibility-reducing particles (VRPs), but PM_{10} (which includes dust and smoke particles) is a VRP, indicating a possible reason for concern in this area.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

DISCUSSION

a) Work proposed by this project, and any associated emissions, would not conflict with or obstruct the implementation of any applicable air quality management plan for Mendocino County or the NCAQMD. No impact.

b,c) The proposed project would not emit air contaminants at a level that, by themselves, would violate any local, state, or federal ambient air quality standard, or contribute to a permanent or long-term increase in any air contaminant. Most construction will take place using hand tools. However, construction of the boardwalk entrance would generate short-term emissions of fugitive dust (PM_{10}) and involve the use of equipment that would emit ozone precursors (i.e., reactive organic gases [ROG] and nitrogen oxides, or NOx). Increased emissions of PM_{10}, ROG, and NOx could contribute to existing non-attainment conditions and interfere with achieving the projected attainment standards. Consequently, construction emissions would be considered a potentially significant short-term adverse impact. Implementation of the following mitigation measure, in accordance with the NCAQMD guidelines, would reduce this potential impact to a less than significant level.

MITIGATION MEASURE AIR-1

- All active construction areas would be watered at least twice daily during dry, dusty conditions.
- All trucks hauling soil, sand, or other loose materials on public roads would be covered or required to maintain at least two feet of freeboard.
- All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Excavation and grading activities would be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads.

d) As noted Discussion in III(b,c) above, a limited portion of the project construction would generate dust and equipment exhaust emissions. The boardwalk would remain closed during approximately 10 percent of the reconstruction process. However, day use areas are located adjacent to the boardwalk and its entrance. MacKerricher SP contains approximately 2,300 acres and 10 miles of coastline. Park visitors with conditions that make them sensitive to these emissions would have the option of avoiding the area altogether or remaining in portions of the park that would be upwind or protected from blowing dust or other emissions. The campground is sufficiently distant from the work site to avoid significant exposure. These conditions, in conjunction with Mitigation Measure AIR-1 above, would reduce the potential adverse impact to a less than significant level.

e) The proposed work would not result in the long-term generation of odors. Construction-related emissions might result in a short-term generation of odors, including diesel exhaust and fuel vapors. These odors might be considered objectionable by some park visitors and personnel. However, because construction activities would be short-term and odorous emissions would dissipate rapidly in the air, with increased distance from the source, and visitor exposure to these odors would be extremely limited [see (d) above], potential odor impacts would be considered less than significant.

IV. BIOLOGICAL RESOURCES.

Environmental Setting

MacKerricher State Park supports several plant communities (plant community names follow either Sawyer & Keeler-Wolf, 1995, or Holland, 1986, as appropriate). The proposed project is within or closely adjacent to the following plant communities: Monterey cypress stands, California annual grassland, introduced perennial grassland, northern coastal bluff scrub, tufted hairgrass series, and the beach pine (upland) series. The dominant plant community within the project area is introduced perennial grassland (heavily dominated by *Holcus lanatus*). The project area is limited to two feet on either side of, and including, the existing Laguna Point boardwalk. The new alignment may be moved to one side or the other of the existing alignment in order to avoid sensitive plant locations. The majority of the existing boardwalk—some 2,338 linear feet--is currently three feet wide and will be increased to six feet in width.

The biological investigation for this document included both field surveys and literature and database review. DPR staff conducted on-site investigations for wetlands and waters of the U.S. in July and August of 2002. An in-depth botanical survey, including documentation and mapping of plant communities and rare plant species, was conducted by EDAW, Inc. in March-July, 2001.

Special-Status Species[1]

Queries of the California Department of Fish and Game's Natural Diversity Database (CNDDB, 2004) and the California Native Plant Society's On-line Inventory (CNPS, 2004) were conducted for sensitive biological resources that are known to occur within the Fort Bragg 7.5-minute U.S.G.S. quadrangle map and the surrounding quadrangle maps (i.e., Inglenook, Dutchman's Knoll, Noyo Hill, Mendocino, and Mathison Peak). The three quadrangle maps to the west, northwest, and southwest of the Fort Bragg 7.5-minute quadrangle are open ocean and were not included in the queries.

Sensitive biological resources include plants and animals that have been given special recognition by federal, state, or local resource agencies and organizations. Also included are habitats that are listed as critical for the survival of a listed species or have special value for wildlife species, and plant communities that are unique or of limited distribution. Threatened and Endangered plants and wildlife species and Species of Concern are special-status species that have legal protection.

[1] For the purposes of this document, special-status species are defined as plants and animals that are legally protected or that are considered sensitive by federal, state, or local resource conservation agencies and organizations. Specifically, this includes species listed as state or federally Threatened or Endangered, those considered as candidates for listing as Threatened or Endangered, species identified by the USFWS and/or CDFG as Species of Concern, animals identified by CDFG as Fully Protected or Protected, and plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (i.e., plants on CNPS lists 1 and 2).

Thirty-seven special-status plant species, 11 wildlife species, and seven plant communities are listed in the CNDDB as occurring within the six quadrangle maps noted above. An additional ten plant species are listed[2] in the CNPS on-line inventory as potentially occurring within the area covered by the six quadrangle maps. The results of the CNDDB and CNPS record searches are included in Appendix B.

Of all the species and communities obtained from the databases, a total of 11 plant species, two wildlife species, and one plant community are known to occur within MacKerricher State Park. The species obtained from the databases, along with several other species that are of local concern, are addressed below and the potential for each species' occurrence within the project area is evaluated.

SPECIES KNOWN TO OCCUR IN MACKERRICHER STATE PARK

Tidewater goby (*Eucyclogobius newberryi*) – A Federal Endangered species and a California Species of Concern that occurs in brackish water habitats along the California coast from Agua Hedionda Lagoon in San Diego County to the mouth of the Smith River in Del Norte County. The species is found in shallow lagoons and lower stream reaches where there is still, but not stagnant, water and high oxygen levels. The species has been documented as occurring within MacKerricher State Park in Virgin and Pudding Creeks. However, there is no habitat for tidewater goby within the proposed project area of the Laguna Point boardwalk.

Western snowy plover (*Charadrius alexandrinus nivosus*) – A Federal Threatened species and a California Species of Concern that occurs on sandy beaches, salt pond levees, and shores of large alkali lakes. It needs sandy, gravelly, or friable soils for nesting. This species is known to nest at MacKerricher State Park near Virgin Creek and in the Ten Mile dunes but has not been observed near the Laguna Point boardwalk proposed project site. There is no suitable habitat for snowy plovers within the proposed project area.

Howell's spineflower (*Chorizanthe howellii*) – A Federal Endangered and California Threatened plant species, Howell's spineflower occurs on coastal sand dunes, sandy slopes and sandy areas in coastal prairie and in coastal scrub plant communities. The species is endemic to Mendocino County, with nearly all of the population occurring within the park. Locations of Howell's spineflower within MacKerricher State Park were mapped by EDAW, Inc. in 2001 as part of a botanical survey. There are known occurrences of Howell's spineflower within the proposed Laguna Point boardwalk project area.

Menzies's wallflower (*Erysimum menziesii* ssp. *menziesii*) – A Federal Endangered and California Endangered plant species that occurs on coastal dunes, it is known only from Mendocino and Monterey Counties. EDAW's 2001 botanical survey located and mapped site locations for Menzies's wallflower within MacKerricher State Park. Menzies's wallflower does

[2] California Native Plant Society (CNPS) Lists: List 1A = presumed extinct in California; List 1B = rare or endangered in California and elsewhere; List 2 = rare or endangered in California, more common elsewhere; List 3 = need more information; List 4 = plants of limited distribution.

not occur within the proposed project area of the Laguna Point boardwalk.

Short-leaved evax (*Hesperevax sparsiflora* var. *brevifolia*) – A California Native Plant Society List 1B plant (Rare and Endangered in California and elsewhere). It occurs within northern coastal bluff scrub, dune mat habitats, and in open sandy pockets within California annual grassland series, California oatgrass series, tufted hairgrass series, northern coastal scrub and ruderal/degraded dune mat areas. EDAW's 2001 botanical survey located and mapped site locations for short-leaved evax within MacKerricher State Park. The species is known to occur within the project area of the Laguna Point boardwalk.

North coast phacelia (*Phacelia insularis* var. *continentis*) – A California Native Plant Society List 1B plant (Rare and Endangered in California and elsewhere). It occurs within the sand verbena-beach bursage series and within sandy openings in northern coastal bluff scrub habitats. EDAW's 2001 botanical survey located and mapped site locations for north coast phacelia within MacKerricher State Park. The species is known to occur within the project area of the Laguna Point boardwalk.

Blasdale's bent grass (*Agrostis blasdalei*) – A California Native Plant Society List 1B plant (Rare and Endangered in California and elsewhere). It occurs on sandy soils within northern coastal bluff scrub habitat, tufted hairgrass series, California oatgrass series, and in sandy openings within the California annual grassland series. EDAW's 2001 botanical survey located and mapped site locations for Blasdale's bent grass within MacKerricher State Park. Known occurrences exist within the project area for the Laguna Point boardwalk.

Other CNPS List 1B and List 2 species - pink sand verbena (*Abronia umbellata* ssp. *breviflora*), swamp harebell (*Campanula californica*), round-headed Chinese houses (*Collinsia corymbosa*), Mendocino coast Indian paintbrush (*Castilleja mendocinensis*), perennial goldfields (*Lasthenia macrantha* ssp. *macrantha*), and coast lily (*Lilium maritimum*) have all been documented and mapped within MacKerricher State Park by EDAW, Inc. during the 2001 Botanical Survey completed for the California Department of Parks and Recreation. Although they occur within MacKerricher State Park, none of these species are known to occur within the project area of the proposed Laguna Point boardwalk project.

Thurber's reed grass (*Calamagrostis crassiglumis*) – a CNPS List 2 plant species that occurs in coastal scrub (mesic), marshes, and swamps (freshwater) from ten to 45 meters in elevation. This plant species is known from Inglenook Fen in MacKerricher State Park. The species is not known from the project area, but potential for occurrence exists based upon the presence of habitat.

Deceiving sedge (*Carex saliniformis*) – A CNPS List 1B plant species that occurs in coastal prairie, coastal scrub, meadows and seeps, marshes and swamps from three to 320 meters in elevation. The species is not known from the project area, but potential for occurrence exists based upon the presence of suitable habitat.

Green sedge (*Carex viridula* var. *viridula*) – A CNPS List 1B plant species that occurs in bogs and fens, marshes and swamps (freshwater), and North Coast coniferous forest (mesic). This

plant species is known from Inglenook Fen in MacKerricher State Park. Although it is not known from the project area, the potential for occurrence exists based upon the presence of suitable habitat.

Dark-eyed gilia (*Gilia millefoliata*) – A CNPS List 1B plant species that occurs in dunes between two and 20 meters in elevation. Although this species occurs within MacKerricher State Park, it is not expected to occur in the project area due to lack of suitable habitat.

Point Reyes horkelia (*Horkelia marinensis*) – A CNPS List 1B plant species that occurs in coastal dunes, coastal prairie, and coastal scrub from five to 350 meters in elevation. This species is not known from the project area, but potential for occurrence exists based upon the presence of suitable habitat.

Purple-stemmed checkerbloom (*Sidalcea malviflora* ssp. *purpurea*) – A CNPS List 1B plant species that occurs in broadleaved upland forest and coastal prairie. This species occurs in the vicinity of Lake Cleone in MacKerricher State Park. Although it is not known from the project area, the potential for occurrence exists based upon the presence of suitable habitat.

Coastal triquetrella (*Triquetrella californica*) – A CNPS List 1B plant species that occurs in coastal bluff scrub and coastal scrub. This species is not known from the project area, but potential for occurrence exists based upon the presence of suitable habitat in the project vicinity.

Raptors - Several special-status raptor species are known to occur within MacKerricher State Park including: osprey, sharp-shinned hawk, northern harrier, white-tailed kite, Cooper's hawk, and short-eared owl. All are California Species of Concern except for the white-tailed kite, which is a California Fully Protected Species and a Federal Species of Concern. There is a potential for these species to nest within the general vicinity of the proposed project.

SPECIES NOT KNOWN TO OCCUR IN MACKERRICHER STATE PARK – OCCURRENCE POSSIBLE IN PROJECT AREA

The following Threatened and Endangered species are not known to occur within MacKerricher State Park, but have the potential to occur there. An explanation for the possibility of occurrence within the project area is given with the description of each species that follows.

Lotis blue butterfly (*Lycaeides argyrognomon lotis*) – A Federal Endangered species that inhabits wet meadows or poorly drained sphagnum-willow bogs, in northern coastal California, where soils are waterlogged and acidic. The host plant for this species is *Lotus formosissimus*. There is habitat for this species in the proposed project area of the Laguna Point boardwalk. A 2003 survey for the lotis blue butterfly (Gordon F. Pratt, Entomology Department, University of California, Riverside, CA 92521) states: "Site 3 was the coastal grasslands and pine woodland that border the coastal prairie from west of Lake Cleone south to Virgin Creek. There were extensive stands of *Lotus formosissimus* at this site. It was visited four times on March 27, May 19, 22, June 15, and July 31….Unfortunately the lotis blue was not found here. Because of the poor weather conditions, which often occurs along the coast, the lotis blue could have been

overlooked."

Purple martin (*Progne subis*) – A California Species of Concern that inhabits woodlands, low elevation coniferous forests of Douglas fir, ponderosa pine, and Monterey pine. The species nests in old woodpecker cavities and in human-made structures. Nests are often located in tall, isolated trees or snags. Purple martins could potentially nest in trees within the project area of the Laguna Point boardwalk.

Sensitive bat species – There are several sensitive bat species that may occur within MacKerricher State Park. Some of these species have been known to roost in tree cavities. The California Species of Concern bats that might roost within the project area of the Laguna Point boardwalk are the pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*). The Federal Species of Concern bats that might roost within the project area are the long-eared myotis (*Myotis evotis*), the long-legged myotis (*Myotis volans*), and the Yuma myotis (*Myotis yumanensis*).

Bolander's reed grass (*Calamagrostis bolanderi*) – A CNPS List 4 plant species that is not known to occur within MacKerricher State Park. It occurs in bogs and fens, closed-cone coniferous forest, coastal scrub, meadows and seeps (mesic), marshes and swamps (freshwater), and North Coast coniferous forest (mesic). There is a potential for its occurrence within the project area.

Whitney's farewell-to-spring (*Clarkia amoena* ssp. *whitneyi*) – A CNPS List 1B plant species that occurs in coastal bluff scrub and coastal scrub. While not known to occur within MacKerricher State Park, there is a potential for its occurrence in or near the proposed project site based upon the presence of these habitats in the project vicinity.

Roderick's fritillary – (*Fritillaria roderickii*) – A California Endangered and CNPS List 1B plant species that occurs in coastal bluff scrub, coastal prairie, and valley and foothill grassland. It is not known to occur in MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Hayfield tarplant – (*Hemizonia congesta* ssp. *leucocephala*) – A CNPS List 3 plant species that occurs in coastal scrub and valley and foothill grassland. It is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

North Coast semaphore grass – (*Pleuropogon hooverianus*) – A California Rare and CNPS List 1B plant species that occurs in broadleaved upland forest, meadows and seeps, marshes and swamps (freshwater), North Coast coniferous forest, and vernal pools. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Great burnet (*Sanguisorba officinalis*) – A CNPS List 2 plant species that occurs in bogs and fens, broadleaved upland forest, meadows and seeps, marshes and swamps, North Coast coniferous forest, and riparian scrub. The species is not known to occur within MacKerricher

State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Oregon Coast Indian paintbrush (*Castilleja affinis* ssp. *littoralis*) – A CNPS List 2 plant species that occurs in coastal bluff scrub, coastal dunes, and coastal scrub. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Supple daisy (*Erigeron supplex*) – A CNPS List 1B plant species that occurs in coastal bluff scrub and coastal prairie. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Pacific gilia (*Gilia pacifica*) - A CNPS List 1B plant species that occurs in coastal bluff scrub and coastal prairie. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Seacoast ragwort (*Senecio bolanderi* var*. bolanderi)* – A CNPS List 2 plant species that occurs in coastal scrub and North Coast coniferous forest habitats at elevation of 30-60 meters. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habitat.

Maple-leaved checkerbloom (*Sidalcea malachroides*) – A CNPS List 1B plant species that occurs in broadleaved upland forest, coastal prairie, coastal scrub, and North Coast coniferous forest from two to 700 meters in elevation. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habit.

Marsh violet (*Viola palustris*) – A CNPS List 2 plant species that occurs in coastal scrub (mesic), bogs, and fens from zero to 150 meters. The species is not known to occur within MacKerricher State Park, but the potential for occurrence in the project area exists based upon the presence of suitable habit.

SPECIES NOT KNOWN TO OCCUR IN MACKERRICHER STATE PARK - OCCURRENCE NOT EXPECTED IN PROJECT AREA

The following Threatened and Endangered species are not known from MacKerricher State Park and are not expected to occur within the project area. An explanation for the unlikelihood of their occurrence is given with the description of each species that follows.

Tricolored blackbird (*Agelaius tricolor*) – A California Species of Concern that requires open water, a protected nesting substrate, and foraging area. Tricolored blackbirds are highly colonial and prey on insects within a few kilometers of the colony. Nesting habitat for this species does not occur in the project area of the Laguna Point boardwalk.

Red tree vole (*Arborimus pomo*) – A California Species of Concern that occurs in Douglas fir,

redwood, and montane hardwood-conifer forests within the north coast fog belt from Oregon to Sonoma County. Red tree voles feed almost exclusively on Douglas fir needles, but will occasionally feed on needles of grand fir, hemlock, or spruce. Portions of the Laguna Point boardwalk pass through stands of Monterey cypress and through patches of the Beach Pine series, but no Douglas fir, grand fir, hemlock, or spruce occur within the project area. It is therefore very unlikely that the red tree vole occurs within the Laguna Point boardwalk project area.

Tailed frog (*Ascaphus truei*) – A California Species of Concern that occurs in montane hardwood-conifer, redwood, Douglas fir, and ponderosa pine forests. The tailed frog is restricted to perennial montane streams. The tadpoles require water that is below 15 degrees Centigrade. Habitat for the tailed frog does not occur within the proposed project area of the Laguna Point boardwalk.

Tufted puffin (*Fratercula cirrhata*) – A California Species of Concern that nests along the coast on islands, islets, and, rarely, on mainland cliffs. It requires a substrate into which it can burrow on island cliffs or grassy island slopes. The Laguna Point boardwalk is on a flat, coastal terrace dominated by dense *Holcus lanatus*. Suitable nesting habitat for the tufted puffin does not occur within the boundaries of the proposed project area.

Behren's silverspot butterfly (*Speyeria zerene behrensii*) – A Federal Endangered species that inhabits coastal terrace prairies where its larval food plant, violet (*Viola adunca*), is found. Currently, the Behren's silverspot butterfly is known only from one site in southern Mendocino County. Although habitat may be present within the project site, its occurrence there is unlikely due to limited distribution of this species.

California red-legged frog (*Rana aurora draytonii*) – A Federal Threatened species and a California Species of Concern that occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Potential habitat for the California red-legged frog is found at Lake Cleone, approximately 1,000 yards from the project site, although its presence there has not been confirmed. There is no habitat for California red-legged frog within the proposed project site at the Laguna Point boardwalk.

Western pond turtle (*Clemmys marmorata*) – A California Species of Concern, the western pond turtle requires some slack- or slow-water aquatic habitat. They also usually leave the aquatic site to reproduce, to aestivate, and to overwinter. Potential aquatic habitat for the western pond turtle is found in Lake Cleone, approximately 1,000 yards from the project site.

Southern torrent salamander (*Rhyacotriton variegatus*) – A California Species of Concern that occurs in old-growth forests of coastal redwood, Douglas fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. The species requires cold, well-shaded, permanent streams and seepages. They occur within the splash zone or on moss-covered rocks within trickling water. There is no habitat for southern torrent salamander within the proposed project area of the Laguna Point boardwalk.

Humboldt milk vetch (*Astragalus agnicidus*) – A California Endangered and CNPS List 1B plant species that occurs in disturbed openings in broadleafed upland forest. The species is

known to occur inland from the project area in disturbed areas of the Jackson Demonstration State Forest, and from one area in Humboldt County. Habitat for this species does not occur within the proposed project area of the Laguna Point boardwalk.

Point Reyes blennosperma (*Blennosperma nanum* var. *robustum*) – A California Rare and CNPS List 1B plant species that occurs in sandy soils in coastal prairie and coastal scrub plant communities. The species is endemic to Marin and Mendocino Counties. EDAW, Inc. conducted a botanical survey in 2001 at MacKerricher State Park for the California Department of Parks and Recreation. Rare plant species were surveyed within the park unit and their locations mapped. Point Reyes blennosperma occurs a couple miles south of the project site at Glass Beach headlands. Although suitable habitat for the species occurs within the proposed project area, the species is not known to occur within the project area.

Hair-leaved rush (*Juncus supiniformis*) – A CNPS List 2 plant species that occurs in bogs and fens, marshes, and swamps. The species is not known to occur within MacKerricher State Park and it is not expected to occur in the project area because suitable habitat for the species is not present.

White-beaked rush (*Rhynchospora alba*) – A CNPS List 2 plant species that occurs in bogs and fens, meadows and seeps, marshes and swamps (freshwater). The species is not known to occur within MacKerricher State Park and it is not expected to occur in the project area because suitable habitat for the species is not present.

Pygmy manzanita (*Arctostaphylos mendocinoensis*) – A CNPS List 1B plant species that is known from only one occurrence on the Mendocino Plains. It occurs in closed-cone coniferous forest on acidic, sandy clay. Because of its limited distribution and substrate requirements, this species is not expected to occur within the project area.

Humboldt milk-vetch (*Astragalus agnicidus*) – A California Endangered and CNPS List 1B plant species that occurs in broadleaved upland forest and North Coast coniferous forest from 195 to750 meters in elevation. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside the elevation range for the species.

California sedge (*Carex californica*) – A CNPS List 2 plant species that occurs in bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, marshes and swamps from 90 to250 meters in elevation. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside of the elevation range for the species.

Livid sedge (*Carex livida*) – This species is presumed to be extinct in California. It was known historically from only one location within California near Mendocino. It is not expected to occur within the project area.

Lyngbye's sedge (*Carex lyngbyei*) – A CNPS List 2 plant species that occurs in marshes and swamps (brackish or freshwater). It is not expected to occur within the project area because suitable habitat for the species does not exist there.

Humboldt Bay owl's-clover (*Castilleja ambigua* ssp. *humboldtiensis*) – A CNPS List 1B plant species that occurs in marshes and swamps from zero to three meters in elevation. This species in not expected to occur within the project area due to lack of suitable habitat and because the project site is outside the elevation range for the species.

Pygmy cypress (*Cupressus goveniana* ssp. *pigmaea*) – A CNPS List 1B plant species that occurs on podzol-like soil in closed-cone coniferous forest. This species is not expected to occur within the project area because suitable habitat for the species does not exist there.

Baker's goldfields (*Lasthenia macrantha* ssp. *bakeri*) – A CNPS List 1B plant species that occurs in closed-cone coniferous forest openings and coastal scrub between the elevations of 60 and520 meters. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside of the elevation range for the species.

Running-pine (*Lycopodium clavatum*) – A CNPS List 2 plant species that occurs in marshes and swamps and in North Coast coniferous forest (mesic) at elevations of 60 to790 meters. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside of the elevation range for the species.

Northern microseris (*Microseris borealis*) – A CNPS List 2 plant species that occurs in bogs and fens, lower montane coniferous forest, meadows and seeps from 1,000 to2,000 meters in elevation. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside of the elevation range for the species.

Leafy-stemmed mitrewort (*Mitella caulescens*) – A CNPS List 2 plant species that occurs in broadleaved upland forest, lower montane coniferous forest, meadows and seeps, and North Coast coniferous forest (mesic) at elevation of 610 to1,700 meters. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside of the elevation range for the species.

Bolander's beach pine (*Pinus contorta* ssp*. bolanderi*) – A CNPS List 1B plant species that occurs in podzol-like soil in closed-cone coniferous forest at elevation of 75 to250 meters. This species is not expected to occur within the project area because suitable habitat for the species does not exist there.

Dwarf alkali grass (*Puccinellia pumila*) – A CNPS List 2 plant species that occurs in marshes and swamps at elevation of one to ten meters. This species is not expected to occur within the project area because the project area, at approximately 30 meters in elevation, is outside of the elevation range for the species and because suitable habitat does not exist in the project area.

Long-beard lichen (*Usnea longissima*) – This species occurs in the "redwood zone" on a variety of trees including big-leaf maple, oak, ash, Douglas fir, and California bay. This species is not expected to occur within the project area because suitable habitat for the species does

not exist there.

SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are plant communities that are regionally uncommon or unique, unusually diverse, or of special concern to local, state, and federal agencies. Removal or substantial degradation of these plant communities constitutes a significant adverse impact under CEQA.

The CNDDB record search produced a list of seven sensitive natural communities for the Fort Bragg and surrounding 7.5-minute quadrangles. The sensitive communities are: coastal and valley freshwater marsh, coastal brackish marsh, fen, grand fir forest, Mendocino pygmy cypress forest, northern coastal salt marsh, and sphagnum bog. Inglenook Fen occurs within MacKerricher State Park, but is not within the vicinity of the project site. None of these plant communities occur within the proposed project area of the Laguna Point boardwalk.

WETLANDS AND WATERS OF THE UNITED STATES

The U.S. Army Corps of Engineers (USACOE) defines wetlands as lands that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Typically, USACOE jurisdictional wetlands meet three criteria: they have hydrophytic vegetation, hydric soils, and wetland hydrology.

Waters of U.S. are defined as all waters used in interstate or foreign commerce, waters subject to the ebb and flow of the tide, all interstate waters including interstate wetlands and all other waters such as: intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds. Waters of the U.S. are under the USACOE jurisdiction.

The California Coastal Commission defines wetlands as all “lands which may be covered periodically or permanently with shallow water…” (Section 30121, Coastal Act). The presence of only one of the three wetland parameters (i.e., soils, vegetation, or hydrology) that are needed to meet the USACOE definition of a wetland is needed to meet the criteria for a Coastal Commission wetland.

The entire length of the existing Laguna Point boardwalk occurs within Coastal Commission-defined wetlands. This determination was made based upon dominance of a facultative wetland plant species (*Holcus lanatus*) that occurs throughout the project area. The Sawyer & Keeler-Wolf (1995) plant community classification for the site is the Introduced Perennial Grassland Series.

ISSUES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

(a) Purple martin, a California Species of Concern, is known to nest in old woodpecker cavities in trees and could potentially be nesting within the proposed project area. If the species is present within the project area, temporary impacts to nesting birds could result from project implementation. No permanent habitat loss will occur as a result of the project. The purple martin nests from March through August in California, with the most active period in June, and migrates to South America during the winter months. Implementation of the following mitigation measure will reduce any impacts to purple martin from project implementation to less than significant.

MITIGATION MEASURE BIO-1 (PURPLE MARTIN)

- A survey for nesting purple martins will be conducted within the project area every two weeks until mid-June by a DPR qualified biologist.
- If purple martins are found nesting within a designated buffer zone as determined by a qualified biologist or resource ecologist, project construction will not occur in that buffer zone during the nesting season of March through August.

Several sensitive bat species have the potential to roost within the project area. Impacts to roosting bats within the project area could occur as a result of project construction. Implementation of the following mitigation measures would reduce impacts to roosting bats to a less than significant level.

MITIGATION MEASURE BIO-2 (SENSITIVE BAT SPECIES)

- A survey for suitable habitat (e.g., hollows in trees or snags) for void-roosting sensitive bat species (Townsend's big-eared and pallid bats) within 100 feet of the Laguna Point boardwalk project area will be conducted prior to project construction.
- If sensitive bat species are found within the project area, project construction will not occur during the roosting season: May 1 through August 30.

Several raptor species are known to occur within MacKerricher State Park although none are known to nest within the project area of the Laguna Point boardwalk. Raptors and their nests are protected under the California Fish and Game Code. Impacts to nesting raptors within the proposed project area could occur as a result of increased noise levels during project construction. Implementation of the following mitigation measure would reduce impacts to nesting raptors to a less than significant level.

MITIGATION MEASURE BIO-3 (RAPTORS)

- A focused survey for raptor nests will be conducted by a DPR-qualified resource ecologist during the nesting season (February 1 to August 31) to identify active nests within 500 feet of the project area. The survey will be conducted no less than 14 days and no more than 30 days prior to the beginning of construction.
- If nesting raptors are found within 500 feet of the project area, no construction will occur during the active nesting season of February 1 to August 31, or until the young have fledged (as determined by a DPR-qualified resource ecologist).

Howell's spineflower, a Federal Endangered and California Threatened plant species, is known to occur within the project area. **Short-leaved evax** is a California Native Plant Society List 1B plant (i.e., Rare and Endangered in California and elsewhere) that occurs along the existing Laguna Point boardwalk. The largest occurrence occurs on one side of the existing boardwalk. **North coast phacelia** is a California Native Plant Society List 1B plant (Rare and Endangered in California and elsewhere) that is known to occur within the project area of the Laguna Point boardwalk. **Blasdale's bent grass** is a California Native Plant Society List 1B plant (Rare and Endangered in California and elsewhere) that is known to occur in the proposed project area. Construction of the proposed project could

impact these species at this site. Implementation of the following mitigation measures will reduce project impacts to these sensitive plant species to a less than significant level (Cooley, 2002, pers. comm.).

MITIGATION MEASURE BIO-4 (SHORT-LEAVED EVAX, NORTH COAST PHACELIA, BLASDALE'S BENT GRASS)

- Occurrences of sensitive plant species within 25 feet of the project area will be located during the blooming period prior to project construction. The perimeter of these occurrences will be marked with flagging and construction monitors and work crews will be instructed to avoid these areas.
- Upon the conclusion of pre-construction monitoring, should impacts to any sensitive plant species be unavoidable due to constraints on the location of the boardwalk, construction in those sites (where the APE overlaps the plant population) will occur between August 1 and December 31, after seed set and before seedling germination.
- The boardwalk corridor will be shifted laterally to avoid permanent direct shading impacts to any sensitive plant species.
- Botanical monitors will be present during ground-disturbing construction-related activities to ensure minimal disturbance to sensitive plant occurrences.
- If complete avoidance of impacts to these plant species is not achieved, the effectively damaged or affected habitat area will be mitigated at a 3:1 ratio through habitat enhancement, or as determined appropriate after further consultation with appropriate resource agencies. Capture of propagules or salvage of individuals of these plant species will be included in habitat enhancement.
- An interpretive sign highlighting sensitive plant species at Laguna Point will be installed along the boardwalk after project construction.

MITIGATION MEASURE BIO-5 (HOWELL'S SPINEFLOWER)

- Occurrences of Howell's spineflower within 25 feet of the project area will be located during the blooming period prior to project construction. The perimeter of these occurrences will be marked with flagging and construction monitors and work crews will be instructed to avoid these areas.
- Upon the conclusion of pre-construction monitoring, should impacts to Howell's spineflower be unavoidable due to constraints on the location of the boardwalk, construction in those sites (where the APE overlaps the plant population) will be suspended and the U. S. Fish and Wildlife Service will be consulted to determine appropriate procedures for continuing construction and for mitigating impacts.

(b) The project will not have an impact on any riparian habitat or other sensitive community. There are no riparian or sensitive communities within the proposed project area.

(c) The project will have impacts to Coastal Commission-defined wetlands under the Coastal Act. Since the entire project area is within wetlands as defined by the Coastal Commission, excavation and installation of all footings for the new boardwalk would require mitigation for

impacts. Additionally, the greater width of the new boardwalk will result in impacts to coastal terrace prairie wetland vegetation from shading.

MITIGATION MEASURE BIO-5 (WETLANDS)
• Impacts to coastal terrace prairie wetland habitat as a result of shading from new boardwalk will be mitigated by enhancing or revegetating nearby coastal terrace prairie habitat, within MacKerricher State Park, in-kind at a 1:1 ratio (or as required by the Coastal Commission).

Please refer to Mitigation Measure Cult-2 in the Cultural Resources Section for additional mitigation measures that will enhance native habitat at MacKerricher State Park through the planting of native plant species to protect sensitive archeological sites.

(d) There is no stream in the proposed project area therefore no impacts will be made to the movement of migratory or resident fish species. The project area is not within a major wildlife migration corridor or wildlife nesting area and therefore will not substantially interfere with the movement of migratory or resident wildlife. Also, the new boardwalk will be constructed principally within the alignment of the existing boardwalk, so the project area will not be substantially modified after this project is constructed. No impact.

e,f) This project does not conflict with any local ordinances, adopted conservation plans, or policies. No impact.

V. CULTURAL RESOURCES.

Environmental Setting

MacKerricher State Park is located on the northern Mendocino County coast immediately north of the City of Fort Bragg and stretches to the mouth of Ten Mile River. The park unit comprises 2,300 acres situated west of State Route 1 and the town of Cleone. The majority of this unit is relatively flat with an elevation range of sea level to 120 feet at the northern end.

This large and diverse park can be divided in two sections, north and south. The northern portion extends south from Ten Mile River to Lake Cleone. This area is composed of 5½ miles of sandy shoreline backed by low bluffs and coastal dunes. The southern portion of the park is a relatively flat, open marine terrace that gradually slopes up from Pudding Creek at the southern boundary toward Lake Cleone and Laguna Point, a rocky headland that dominates the park coastline. The marine and tidal environments are abundant in food resources as well as streams and seasonal lagoons. The fresh water aquatic resources are numerous and varied. Plant communities in the park are diverse and include coastal strand and dune swale vegetation, grasslands and coast scrub plant communities on the terraces, conifer tress around Lake Cleone, and riparian vegetation associated with the streams and lagoons (GP 1995).

The topography and natural resources in the park provided an ideal setting for prehistoric occupation and resource procurement, evidenced by 31 Native American sites recorded in the park. Two of these sites are located within the project's Area of Potential Effect (APE). In contrast to the 31 Native American sites, few historic resources have been recorded in the park. Most of the historic resources are associated with the transport of timber and are located outside of the APE.

To date, none of the sites located in the park have be officially nominated for inclusion into the National Register of Historic Places (NRHP) or the California Register of Historic Places (CRHP). Until an official determination of significance is made in consultation with the California State Historic Preservation Officer, all cultural resources in the park and more specifically the APE will be treated as eligible for the NRHP and CRHP.

Historic Resources

Historic resources and features in the park are primarily associated with the logging industry and the transport of timber. The Ten-Mile Logging Railroad was constructed by the Union Lumber Company in 1916 to transport timber. The railroad ran across two trestles; only the one at Pudding Creek exists today. The company operated the railroad until 1949, when the route was converted into the paved Haul Road for trucks. The 1949 conversion of the railroad to a truck right-of-way greatly improved efficiency and reduced the coast of transporting logs from the Ten-Mile timber shed to the Fort Bragg mill. At that time, the narrow asphalt road ran from the mill north along the beach of MacKerricher State Park to Ten Mile River, where it skirted around the southern approaches to the old 1915 Ten Mile River Bridge. From this bridge, the road followed the south bank of Ten Mile River eastward before it descended into the woods.

In 1969, the Union Lumber Company merged its operations with the Boise-Cascade

Corporation and in 1973, the operation changed hands again when Georgia-Pacific acquired it. After a violent storm in 1983 caused a half-mile stretch to wash away along the beach, Georgia-Pacific abandoned this section of the road, which is located within MacKerricher SP between Fort Bragg and the Ten-Mile River Bridge. By early 1994, DPR purchased the sections of the Haul Road that lie within the boundaries of the park.

The Haul Road and remains of the historic railroad grade were originally recorded as an archaeological linear resource in 1985, with the state trinomial (cultural resource serial number) CA-MEN-2946H. Whatford evaluated the Haul Road and associated features in 1997 and determined it was eligible for the National Register of Historic Places as a "historic district" under Criterion A and Criterion C. CA-MEN-2946H is located east of the APE and will not be impacted by this project.

Historic Archaeological Resources

Two historic archaeological resources have been documented in the park (CA-MEN-2946H, CA-MEN-2358H). Additionally, two prehistoric sites contain historic artifacts (CA-MEN-2230H, CA-MEN-828). The historic sites include the Haul Road and associated features (CA-MEN-2946H) described above and CA-MEN-2358H, a refuse dump with burnt ceramics, glass, and metal. Both historic sites and CA-MEN-2230H are located well out of the project area and will not be impacted by this project. CA-MEN-2230H contains flaked glass tools, trade beads, and ceramics, in addition to traditional materials. This site may reflect Native American adaptation during the reservation period at Fort Bragg. CA-MEN-828 is a multi-component site comprising a prehistoric shell midden and buried features associated with the historic Cleone lumberyard and wharf. This site is located within the APE.

Prehistoric Archaeological Resources

Native American sites in MacKerricher State Park represent a relatively intact series of settlement systems in an area used with varying intensity over the past 2,000 years. The resources represent Pomo and Coast Yuki occupation and are significant in their demonstrated potential to answer research questions relating to chronology, resource utilization, settlement patterns, and acculturation processes. The sites range from small temporary camps to large occupation areas with house depressions and dance pits. The cultural assemblages at these sites include lithic scatters, flaked tools, and groundstone implements. One site includes a historic component as well. Based on the information compiled by the record search and given the local topography and natural environment, the proposed project is located in an area considered to be extremely sensitive for cultural resources.

The record search/literature review indicates 31 prehistoric sites, including one with a historic component and one multi-component, have been recorded in the park. Site types have been divided into three primary types. Shell middens are the most common followed by superficial shell scatters, and the least common, a single lithic scatter containing neither shell nor midden. The distribution of these sites can be organized into clusters that are located in the vicinity of, or can be described with reference to, named geographic features (GP 1995). Four sites have been recorded in the Laguna Point area (CA-MEN-826, -828, -829, -830). Two sites, CA-MEN-826 and -826, are located within the boundary of the APE

CA-MEN-828 was originally recorded by Melander in 1969 and again by DPR archaeologists

Francis Riddell and William Olsen in 1971. The most recent update was in 1985 by Hines and Rivers. C. Carrillo and B. Douglas, Caltrans archaeologists, were the first to report a historic component, consisting of the remains of a historic period pier and ship loading area on the north edge of the site. The prehistoric component is described as a dark shell midden of varying intensity located on an open coastal bluff. A small midden deposit on a sandstone outcrop, now in the intertidal zone, indicates that only the eastern portion of the site remains. Finds at the site include fire-affected rock and marine shell consisting of mytilus, blasnus, olivella, tegula, and limpet. The site has been heavily impacted by coastal erosion, which is being expedited by heavy pedestrian traffic across the midden deposit.

CA-MEN-826 is another shell midden site. The site was originally recorded in 1969 as S-604. During the original recordation only the dense midden deposit was included in the site map/record. The remainder of the site was described as isolated shell lenses. The site consists of a dense to moderate shell midden situated along a sandstone bluff. The northern portion of the site includes the greatest concentrations of shell and fire-affected rock. Today the site is long and narrow; however its original configuration can only be surmised since erosion has remove much of the midden. Possible features at the site include an earthen oven, now greatly eroded, a thick shell lens with blackened earth, and numerous fire-affected rocks. Artifacts include groundstone fragments and fire-affected rocks. Faunal remains consisted of both marine shell and large mammal bones including a sea mammal pelvis and mandible fragments. The midden at its deepest is approximately two meters thick. It is estimated that at least 50 percent of the site has been destroyed by coastal erosion expedited by foot traffic along the terrace.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

DISCUSSION

a) The Haul Road and associated features are located east of the project area and separated by the parking lot for the Laguna Point boardwalk. Given the scope of the project and the location these resources well out of the Area of Potential Effect, this project would have no impact to the historic resources located in MacKerricher State Park.

b) The region, the park unit, and the project area have a high degree of archaeological

sensitivity. The topography and the natural environment provided an ideal setting for prehistoric occupation and land use. Native American sites have been recorded in and around the park unit. Additionally, the park contains archaeological resources and features associated with historical logging activities in the area. Two archaeological sites are located in the project area. Construction activities associated with this project, including but not limited to ground disturbance and staging of equipment, could significantly impact archaeological resources. Implementation of Mitigation Measures **CULT-1** and **-2** would reduce impacts to archaeological deposits to a less than significant level.

MITIGATION MEASURE CULT-1
• Excavation or ground-disturbing work associated with the installation of the concrete piers for construction of new boardwalk would be limited. To level the surface for the pier, the midden soil would only be excavated to no more than two inches below the surface where the soils have already been disturbed or by capping with imported fill material. Any excavation activities deeper than this designated depth would require approval from the DPR-qualified cultural resource specialist assigned to the project. • Vehicle access and staging areas for the project would be restricted to those areas outside of the archaeological deposits. The DPR archaeologist assigned to the project or park personnel familiar with the sites would designate the restricted areas prior to the start of construction activities. • Changes in the footprint or construction techniques resulting in impacts outside the survey area would be reviewed and approved in advance by a DPR archaeologist. Additional surveys (a field inventory and pre-construction testing) would be conducted as necessary prior to the start of work. • Vegetation clearing/removal necessary for construction activities would not be accomplished by pulling within the boundary of the archaeological deposits. Removal would consist of cutting to no more than two inches below ground level in those sensitive areas designated by the DPR archaeologist assigned to the project.

The boardwalk, although used as a protective measure to keep people off the archaeological deposits, has also had a cumulative adverse impact to the cultural resources in the vicinity. People often use the boardwalk as a venue to access the ocean by straying off the walkway and transecting though the midden deposits to get to the ocean. Laguna Point is riddled with “volunteer” trails, many of which are expediting coastal erosion and the degradation of the archaeological deposits. It is recommended that signing be use in combination with access control and protective fencing. Potential cumulative impacts would be reduced to a less than significant level with the implementation of Mitigation Measure **CULT-2.**

MITIGATION MEASURE CULT-2
• Handrails would be put along the boardwalk by the District where volunteer trails

straying off the walkway are adversely impacting the archaeological deposits.
- The District would place jute netting and a layer of mulch over those sensitive areas being impacted by foot traffic straying off the boardwalk.
- These areas would be planted with native plant species to slow down coastal erosion and would discourage foot traffic in undesignated areas.
- Appropriate signage would be developed and installed by the District along strategic locations on the boardwalk. These signs would encourage park visitors to stay on official designated trails. Standard DPR issued signs with such messages as "Fragile Area" and "Area Closed for Plant Restoration" would be appropriate.
- Temporary protective fencing would be installed where the most eastern overlook deck was previously removed. This would discourage foot traffic across culturally sensitive areas and would allow the native vegetation to re-establish in this area.

The project area was surveyed for cultural resources by a DPR archaeologist. During this investigation no new cultural resources were discovered. However, because of the natural ambiguity of archaeological resources (often located below the surface) and the obscured ground visibility due to vegetation, the full extent of the cultural resources may not be known. Ground-disturbing activities proposed as part of the project could significantly impact unknown archaeological deposits in the APE. The following conditions would reduce impacts to previously unidentified archaeological sites and features to a less than significant level:

●In the event that previously unknown cultural resources (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash) were encountered during project construction by anyone, the state representative would put work on hold at that specific location and contractors would be redirected to other tasks. A DPR-qualified archaeologist would record and evaluate the find and work with the state representative to implement avoidance, preservation, or recovery measures as appropriate prior to any work resuming at that specific location.

●In the event that significant cultural resources were found in a project location, a qualified historian, archaeologist, and/or Native American representative (if appropriate) would monitor all subsurface work including trenching, grading, and excavations in that area

C) Four sites with Native American human remains have been documented in MacKerricher State Park. None of these sites are located in the APE. However, because Native American use of the area was extensive there is the potential of inadvertently discovering previously unknown burials. In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR District Superintendent (or authorized representative) would notify the County Coroner, in accordance with 7050.5 of the California Health and Safety Code, and the Native American

Heritage Commission (or Tribal Representative). If a Native American monitor were on-site at the time of the discovery, the monitor would be responsible for notifying the appropriate Native American authorities.

If the coroner or tribal representative determines the remains represent Native American interment, the Native American Heritage Commission in Sacramento and/or tribe would be consulted to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC 5097.98). No human remains or funerary objects would be cleaned, photographed, analyzed, or removed from the site prior to determination.

If it is determined the find indicates a sacred or religious site; the site would be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives would also occur as necessary to define additional site mitigation or future restrictions.

VI. GEOLOGY AND SOILS.

Environmental Setting

Topography

At Laguna Point, the bluff topography is a relatively flat, sloping marine terrace at an elevation of approximately 25 feet above mean sea level (see Appendix A). The terrace generally slopes approximately three degrees to the west, although locally some drainage flows northward, particularly near the point (Vaughan, 2003).

Park Geology

MacKerricher State Park is located within the California Coast Range Geomorphic Province, a northwest trending chain of mountains that forms the central and northern California coastline. At Laguna Point marine terrace deposits overlie the sandstone and interbedded siltstone and shale bedrock of the Coastal Belt of the Franciscan Formation. The Coastal Belt Franciscan rocks range in age from 60 to 100 million years old. The younger marine terrace deposits are less that 1.6 million years old and consist of weakly cemented sands, gravels, and some finer-grained materials (Mendocino County, 2003a), essentially old beach deposits that have been uplifted.

A coastal erosion assessment was conducted by DPR Engineering Geologist Patrick Vaughn in October of 2003 (Vaughn, 2003). Information from his report is used throughout this section. In the project area, the boardwalk occupies the first major marine terrace, which consists of sandy materials ranging in thickness from two to 15 feet, with a moderately well developed soil horizon approximately five feet thick. The terrace deposit is underlain by locally sheared and fractured sandstone (Franciscan Formation). The shear zones have been preferentially exploited by wave attack, creating relatively linear surge channels (dog holes) and bedrock exposures along the base of the terrace.

Soils

Marine terrace soils at the project site are mapped as Sirdak loamy sand, with small included areas of Cabrillo, Heeser, and MacKerricher soils and Tropaquepts, according to data derived from the general USDA soil map (USDA, 2001). These soils are developed from marine sediments and from eolian sand deposits (sand dunes). All of these soils are very deep sandy loams with highly variable hydrologic characteristics. Some soil characteristics are shown in the table below (data derived from USDA, 2001).

SOIL TYPE	Parent Material	Runoff	Erosion potential	Shrink-swell potential
Sirdak sandy loam	Eolian deposits	Slow-rapid	Slight-moderate	Low
Heeser sandy loam	Eolian deposits	Slow-medium	Slight[3]	Low
Cabrillo sandy loam	Marine sediments	Very slow-slow	Slight[4]	Low-moderate
MacKerricher sandy loam	Eolian deposits	Slow-rapid	Slight-moderate	Low
Tropaquepts (clay loams)	Marine sediments	Slow-medium	Slight-moderate	Not listed

[3] Subject to wind erosion if no vegetative cover; subject to landslides on ocean bluff exposures.
[4] Subject to wind erosion if no vegetative cover; subject to landslides on ocean bluff exposures.

Seismicity

The closest active fault, the San Andreas, lies about 10 miles offshore from the project location (DPR, 1995). About 68 miles to the northwest, the San Andreas Fault terminates at the Mendocino Triple Junction, a point where three tectonic plates (the Gorda, North American, and Pacific) meet. This area, known as the Cascadia Subduction Zone, is the most seismically active area in the continental United States. The Cascadia Subduction Zone is capable of generating an earthquake with a Maximum Moment Magnitude of 8.3 (Petersen, et al., 1996). Other active faults of the Maacama Fault Zone are located approximately 25 miles inland near Willits (Jennings, 1994).

The Seismic Shaking Hazard Map (Petersen, 1999) shows that the Laguna Point boardwalk site lies within a zone that has a ten percent probability of experiencing moderate to strong shaking on the order of 0.4g to 0.6g (acceleration due to gravity) within 50 years. No known active faults have been identified in the project area (Jennings, 1994). The 1906 earthquake caused major damage in the nearby town of Fort Bragg. Part of the town burned and the water supply was severed (Mendocino, 2003).

Slope Stability and Erosion

The relatively flat topography at the project site is not susceptible to landslides, but the steep coastal bluff is prone to erosion and bluff retreat. Based on aerial photo review, Vaughan (2003) determined that the rate of coastal bluff retreat is relatively low (~ 0.5 inch/year) in the project area. Two primary processes control the bluff stability in the vicinity of the boardwalk: plucking of the bedrock by wave attack, primarily along shear zones and fractures, and groundwater that appears to percolate through the terrace deposits and preferentially flow along fractures or bedrock shears at the terrace deposit/bedrock contact. Several ‘re-entrants” in the bluff top (areas where the linear appearance of the bluff top in plan view is disrupted by semi-circular or linear scallops) were associated with seeps observed at the exposed contact directly below. At these locations wave attack is generally only a contributing process in the bluff top erosion in that the wave attack steepens the base of the slope but the groundwater and saturation within the terrace deposits leads to their final failure and retreat (Vaughan, 2003).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	I
WOULD THE PROJECT:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☐	☒

DISCUSSION

a) While the potential for the rupture of a known earthquake fault, strong seismic ground-shaking, or seismic-related ground failure certainly exist in this area, this project would not substantially increase the exposure of people or structures to risk of loss, injury, or death as a result of these events.

i) The project site is not located on or near an active fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map from the California Geological

Survey. Therefore, no risk from surface fault rupture should occur at the project site.

ii) The California Geological Survey has determined that the Cascadia Subduction Zone is capable of generating an earthquake with a Maximum Moment Magnitude of 8.3. Other faults in the area (San Andreas) are also capable of generating strong earthquakes. The expected ground acceleration at the project site is on the order of 0.4g to 0.6g (Petersen, 1999). This would result in moderate to strong seismic shaking. However, there would be no increased risk to the public or to structures due to this project, which only involves replacement or repair of existing structures. Some damage could occur to the observation decks (landings) if bluff failure occurs during the earthquake.

iii) Seismic-induced ground failure, such as liquefaction, usually occurs in unconsolidated granular soils that are water saturated. During seismic-induced ground shaking, pore water pressure can increase in loose soils, causing the soils to change from a solid to a liquid state (liquefaction). The Mendocino County General Plan Map (2003b) indicates unconsolidated sediments and potentially liquefiable deposits at the project site. However, the potential for damage to the boardwalk or landing from liquefaction is probably low at the project site.

iv) No known landslides have occurred or have been mapped at Laguna Point. There is always a potential for some failure of the coastal bluff (slumping of terrace material or block falls in the underlying bedrock) during a large earthquake. The potential for risk to the public or property has been somewhat reduced by the previous removal of the two landings that were undermined by erosion. The remaining three landings have or will be repaired and have sufficient setback from the bluff edge at the current time.

b) A temporary increase in erosion may occur during grading and addition of fill soils at the entrance area (concrete path to boardwalk) and trenching for the parking lot drainage work. Topography will not change appreciably due to the project. Implementation of Mitigation Measure GEO-1 below would reduce any contribution to substantial soil erosion or loss of topsoil by the proposed project to a less than significant level.

MITIGATION MEASURE GEO-1 EROSION CONTROL
• Temporary best management practice (BMP) erosion control measures will be used in all areas to control soil and surface water runoff during excavation and grading. The excavation operations will not be planned during the rainy season (October 31 to May 1), but if storms are anticipated during construction, "winterizing" will occur, including the covering (tarping) of any stockpiled soils and the use of temporary erosion control methods to protect disturbed soil. Temporary erosion control measures (BMPs) must be used during all soil disturbing activities and until all disturbed soil has been stabilized (recompacted, revegetated, etc.) These BMPs will include, but not be limited to, the use of silt fences, straw bales, or fiber rolls, to prevent soil loss and siltation into nearby water bodies. (Refer to Appendix E for further details on relevant BMPs.) Implementation of **Mitigation Measure CULT-1,** designed to protect archeological deposits, will also reduce general soil erosion impacts due to the boardwalk reconstruction. • Permanent BMPs for erosion control will consist of properly compacting and revegetating appropriate disturbed soil areas. Implementation of **Mitigation Measure CULT-2**, designed to protect archaeological deposits, will also protect against continued coastal bluff erosion due to human impacts. For more details on the permanent erosion control methods discussed in CULT-2, refer to the Laguna Point Boardwalk Natural and Cultural Resources Mitigation Plan, attached as an appendix.

c) The project is not located within a geologic unit or soil that is known to be unstable, based upon available data. However, any construction along the coastal margin of California must take into account the potential for coastal bluff erosion. Implementation of Mitigation Measure GEO-1 above would reduce any impacts to a less than significant level.

d) Expansive soils are not expected to exist in the project area and are not indicated on the soils map. No new structures are being constructed. No impact should occur from this project.

e) The project does not involve the installation of a septic system or leach field. Therefore, no impact from this project.

f) No known unique paleontological resource or geologic features are present at the project site. Therefore, there is no impact from this project.

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VII. HAZARDS AND HAZARDOUS MATERIALS.

Environmental Setting

Introduction

The existing Laguna Point boardwalk and landings are constructed of 2-inch by 6-inch redwood decking along with the support stringers and pier blocks. There is no known hazardous contamination, nor is the site suspected of containing any hazardous waste, debris, or soils. The original wood decking was not treated with wood preservative chemicals.

Schools

There are only two schools located within a two-and-a-half-mile radius of the project site; they are located in Fort Bragg. None of the schools are within a quarter-mile of the project (Mapquest, 2004).

Airports

One airport is located within a two-mile radius of the project site. The Fort Bragg public airport is located approximately 1.3 miles southeast of Laguna Point (see Appendix A).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment?	☐	☐	☐	☒
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Be located in the vicinity of a private airstrip? If so, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

DISCUSSION

a, b) Construction activities may require the use of potentially hazardous materials, such as fuels, oils, and solvents. However, large quantities of these materials would not be stored at the construction site. These materials are generally used for generators, excavation equipment, and other vehicles, and would be contained in vessels engineered for safe storage. Spills, upsets, or other construction-related accidents could result in a release of fuels or other hazardous substances into the environment. Implementation of Mitigation Measure Hazmat-1 would reduce the potential for adverse impacts from these incidents to a less than significant level.

MITIGATION MEASURE HAZMAT-1 SPILL PREVENTION

- All equipment will be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from park premises.
- Appropriate Best Management Practices (BMPs) from the California Stormwater Quality Association Stormwater Best Management Practice Handbook, Construction, Section 4, will be used, including WM-4 (Spill Prevention and Control) and NS-8, NS-9, and NS-10 (Vehicle and Equipment Cleaning, Fueling, and Maintenance). See Appendix E for BMP details.
- A Spill Prevention and Control Plan (SPC Plan) will be prepared prior to the start of construction and a spill kit maintained on-site throughout the duration of the project. This SPC Plan will include a map delineating construction staging or storage areas and areas where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of Fort Ross SHP during construction, workers will immediately notify the appropriate DPR staff (e.g. project manager or supervisor).
- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, soil, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized site.

c) There are no schools or proposed schools within one-quarter mile of the Laguna Point boardwalk area. The nearest school, the Seventh-Day Adventist School at 22850 North State Route 1, is located approximately 0.8 mile southeast the project site. Therefore, there will be no impacts from this project.

d) The Laguna Point boardwalk is not included on a list of hazardous materials sites (Cortese List) compiled by the California Department of Toxic Substances Control pursuant to Government Code §65962.5. The closest known property with potentially hazardous materials is Glass Beach, located just south of the Pudding Creek Trestle and the southern end of MacKerricher State Park. This property, newly acquired by State Parks, is a listed burn dump site with the California Integrated Waste Management Board. No impact.

e,f) The Laguna Point project site is not located within an airport land use plan, within the landing pattern, or within the 60 decibel Community Noise Exposure Level. A public airport is located within two miles of the project site. No work associated with the project would interfere with airport operations. Therefore, no impact would occur because of this project.

g) All construction and restoration activities associated with the project would occur within the boundaries of MacKerricher State Park. No anticipated work should interfere with any emergency response plans or emergency evacuation plans. Therefore, there would be no impact from this project on an emergency response or evacuation plan.

h) The Laguna Point boardwalk is located on the coastal terrace that contains coastal scrub vegetation. This vegetation does not pose a high fire hazard, but if areas with dry grass are present, proper work safety measures shall be followed during the boardwalk restoration project. The following mitigations would reduce the potential for adverse impacts from this project to a less than significant level.

MITIGATION MEASURE HAZMAT-2 FIRE MANAGEMENT

- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment.
- Construction crews will be required to park vehicles away from flammable material, such as dry grass and brush. At the end of each workday, heavy equipment will be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.

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VIII. HYDROLOGY AND WATER QUALITY.

ENVIRONMENTAL SETTING

Watershed

No major streams or drainages are present within the project boundary (Archambault, 2002). The nearest major freshwater bodies are Mill Creek and Lake Cleone to the northeast (see Appendix A). The project area has some small drainages, but in general surface water moves by sheetflow toward the ocean or percolates into the marine terrace deposits and then exits from the bluff face. Most of the project site is considered to be a California Coastal Act–defined wetland (Warner, 2004).

Flooding

According to FEMA (2003) the project site is not located within the floodplain of any major creek and would not be subjected to a 100-year flood. The coastal area is also subject to potential flooding from a tsunami, an earthquake-generated ocean wave. According to the Mendocino County General Plan (Mendocino, 1981b), the area of MacKerricher State Park should be under a special caution during a tsunami alert, and the beach area should be cleared if a flood tide and a tsunami are coincident. The beach area from sea level to 25 feet above sea level is considered susceptible to tsunami inundation (DPR, 1995).

Water Quality and Water Supply

Water quality in the area is regulated by the North Coast Regional Water Quality Control Board (NCRWQCB). The NCRWQCB Basin Plan (NCRWQCB, 1994) designates the project area as part of the Minor Coastal Streams Hydrologic Unit (HU). Existing Beneficial Uses for this HU include municipal supply, commercial and sport fishing, and estuarine habitat. The proposed Beneficial Uses include agricultural supply; industrial service supply; groundwater recharge; recreation (contact and non-contact activities); cold water habitat; wildlife habitat; migration of aquatic organisms; spawning, reproduction, and/or early development, and aquaculture.

Groundwater resources are limited within the coastal marine terrace deposits, due to the thinness and limited east-west extent of those terraces (DPR, 1995). The water source for MacKerricher State Park is from Lake Cleone, located approximately ½ mile northeast of the project site. Lake Cleone is subject to pollution from State Route 1 runoff and other sources (DPR, 1995). Treating the water (by chlorination) for potable supply creates possible carcinogenic compounds. Salt water intrusion is also a possibility. A future 2006/2007 project to upgrade the water treatment facility at Lake Cleone is currently in the proposal stage.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO MPACT
WOULD THE PROJECT:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map?	☐	☐	☐	☒
h) Place structures that would impede or redirect flood flows within a 100-year flood hazard area?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam?	☐	☐	☒	☐
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a) Potential small releases of sediment could occur during grading for the parking lot drainage repairs and the concrete walkway replacement. Some release of concrete or its components could occur during the reconstruction of the concrete boardwalk entrance.

Other potential impacts to water quality could result from releases of fuels or other fluids from vehicles and equipment during the construction process.

These activities could result in a violation of water quality standards and waste discharge requirements. Mitigation Measure Hydro-1 will control releases of pollutants in storm (or other) water runoff and reduce potential impacts to a less than significant level.

Mitigation Measure Hydro-1 – Water Quality
• Mitigation Measure Geo-1 will be implemented to provide Best Management Practices (BMPs) to control erosion and runoff during the construction phase. • The project will be in compliance with all applicable water quality standards and waste discharge requirements as specified in the NCRWQCB Basin Plan. • Implementation of Mitigation Measure Hazmat-1 will mitigate for impacts to water quality from possible pollutants (fuels and other vehicle fluids) released from vehicles and or other equipment during construction.

b) The project does not involve the extraction of groundwater. No new facilities will be constructed as part of this project, therefore water usage should remain the same. No impact.

c) Existing drainage patterns and stream courses will not be altered in a manner that would significantly increase on- or off-site erosion or siltation. During grading and minor excavation activity the use of Best Management Practices for erosion control (see Mitigation Measure Hydro-1 above) will result in a less than significant impact.

d) Existing drainage patterns and stream courses will not be altered in a manner that would significantly increase the rate or amount of surface runoff in a manner that would result in on- or off-site flooding. Upgrades to the existing parking area drainage system are planned as part of this project. Therefore, no impacts should occur due to this project.

e) This project will not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. No substantial additional sources of polluted runoff are expected from this project. Upgrades to the existing parking area drainage system are planned as part of this project. Implementation of Mitigation Measure Hydro-1 will reduce any impacts from polluted runoff to a less than significant level.

f) This project has the potential to substantially degrade water quality if BMPs to control soil erosion and runoff or release of vehicle or equipment fluids are not in place during construction. If Mitigation Measure Hydro-1 listed above is implemented, then no substantial degradation of water quality will occur and impacts will be less than significant.

g) This project is not located within the 100-year floodplain of any nearby freshwater body (FEMA, 2003), and does not include the construction of housing. Therefore, there is no impact from this project.

h) This project will not place structures that could impede or redirect flood flows within a 100-year floodplain (FEMA, 2003). Therefore, there is no impact from this project.

i) The project will not expose people or structures to an increased risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam. Therefore, there is no increased impact from this project.

j) The project will not result in an increased risk of inundation by tsunami, as only people on the beach would be at risk, as the maximum expected run-up is 25 feet above mean sea level. People on the boardwalk will not be at risk. No impact from this project.

IX. LAND USE AND PLANNING.

ENVIRONMENTAL SETTING

The proposed project site is situated near State Route 1 north of the city of Fort Bragg, in an unincorporated portion of Mendocino County. The boardwalk is in the central portion of MacKerricher SP, a 2,300-acre coastal recreation area, zoned as Open Space in the Mendocino County General Plan (MCGP, 1981) and Coastal Element (1991). Open Space lands are those considered unsuitable for development or most valuable left in the undeveloped natural state. The project site is bounded on three sides by the Park, and to the west by the Pacific Ocean. Lands adjacent to the Park near the project site are designated Rural Residential by the County.

Development and uses within MacKerricher SP are guided by the park's General Plan, along with the Mendocino County LCP (Coastal Element of the MCGP) and the regulations of various agencies with jurisdiction over some or all areas of the park. As a recreational facility, the development of permanent housing (other than a limited number of staff residences) is not a planned use of the park. The park is both a local recreational resource and a destination park, used by locals and out-of-town visitors alike, but does not offer residential opportunities within its boundaries. Business opportunities are limited to DPR-approved concessions or in-holdings that retained the right to operate when land around their businesses was incorporated into the park. The boardwalk entryway and parking and surrounding area has been designated as a High Use Intensity Area under the Park's GP. Such areas provide for facilities such as trails, roads, and parking areas, and represent places where most of the park resource values have been degraded or lost. This portion of the project site is also designated as a Development Zone in the Park's GP, which allows facilities serving a large number of visitors. The remainder of the boardwalk is located in a Low Use Intensity Area, where park resources have, for the most part, been impacted lightly or not at all. These areas are generally reserved for trails and existing roads, and are monitored to avoid unacceptable damage to important resources. Resource restoration is also recommended, as necessary. Activities in Low Use Intensity Areas generally include sightseeing, beachcombing, hiking, nature observation, informal picnicking (MacKerricher SP GP, Land Use Element, pp. 97-112). This part of the project site is designated as a Natural Zone in the Park's GP, which provides for devilments essential for the management, modest use, and appreciation on the Park. Replacement of the Laguna Point boardwalk to widen it is called for in the Park's GP (Facilities Element, p. 157).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a) The proposed project site is wholly within the boundaries of MacKerricher SP. The site does not contain or define an established community and no project activities would disrupt or divide any community functions. Project activities would not prevent access to adjacent parcels. No impact.

b,c) As noted in the Environmental Setting and Discussion IX(a) above, the Laguna Point boardwalk and the proposed project site are within MacKerricher SP and are subject to land use restrictions contained in the MacKerricher SP GP, the Mendocino County GP and LCP, and regulatory agency requirements. No project elements are in conflict with the zoning, regulatory policies, land use plans, conservation plans or ordinances for this area. All appropriate consultation and permits would be acquired, in compliance with all applicable local, state, and federal requirements. No impact.

X. MINERALS.

ENVIRONMENTAL SETTING

The main mineral resource in Mendocino County is aggregate, primarily sand and gravels mined from alluvial deposits (Mendocino County, 2003c). No significant mineral resources have been identified within the boundaries of the project area at Laguna Point. Mineral resource extraction is not permitted under the Resource Management Directives of the Department of Parks and Recreation.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

DISCUSSION

a) The project would not result in the loss of availability of a known mineral resource because no known mineral resources exist within the project boundary. No impact.

b) The project would not result in the loss of availability of a locally important mineral resource recovery site because none exist within the project boundary. No impact.

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XI. NOISE.

ENVIRONMENTAL SETTING

The Laguna Point boardwalk is located in MacKerricher SP, on the coast. The main source of ambient noise is the sound of ocean waves. The sounds of birds are also prevalent. The only other source of ambient noise is the sound of cars in the parking lot and visitor conversations.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	☐	☐	☒	☐
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	☐	☐	☐	☒
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	☐	☐	☒	☐
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

DISCUSSION

a) There are no known regulations governing noise levels for the project site; exterior noise standards for playgrounds and recreational areas [MCGP, Noise Element - Section IV(A)] is 70 dBA from 7am-10pm. The only nearby sensitive receptors would be users of Surfwood Campground and the Walk-In Campground, located approximately 1,000 feet from the boardwalk entrance.

Mechanized equipment will only be used in the area of the boardwalk entrance. Construction noise levels there would fluctuate, depending on the type and number of construction equipment operating at any given time, and would exceed ambient noise levels in the immediate vicinity of the work for brief periods of time. Construction activities would generally be limited to between 7 a.m. and 5 p.m., Monday - Friday. If work during

weekends or holidays is required, no work would occur on those days before 7:30 am or after 8 p.m.

Depending on the specific construction activities being performed, short-term increases in ambient noise levels could result in speech interference at the work site and a potential increase in annoyance to the closest camping facilities and visitors using the adjacent day use area.

Internal combustion engines used for any purpose at the job site would be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction would utilize the best available noise control techniques (e.g., engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary. Stationary noise sources and staging areas would be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, stationary noise sources would be muffled to the extent feasible.

Use of campsites and day use areas is a discretionary act, with park users free to seek out other nearby recreational areas. The project construction will not take place during the summer, when visitation would be highest. The other three campgrounds, which would not be affected by the noise, have a total of 107 spaces that could be used by noise-averse visitors. There are also alternate trail and day use areas available that offer a similar experience to the project site. Less than significant impact.

b) Construction activity would not involve the use of explosives, pile driving, or other intensive construction techniques that could generate significant ground vibration or noise. Minor vibration immediately adjacent to soil compaction equipment at the boardwalk entrance would only be generated on a short-term basis. Therefore, groundborne vibration or noise generated by the project would have a less than significant impact.

c) Once the proposed project is completed, all related construction noise would disappear. Nothing within the scope of the proposed project would result in a substantial permanent increase in ambient noise levels. Therefore, no impact.

d) See Discussion XI(a) above. Less than significant impact.

e,f) This project is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. There is one privately owned airport (Fort Bragg Airport), which is about one mile from the project site, and one small private airstrip within two miles of the project site, but noise from the small aircraft operating from these locations is extremely limited. No impact.

XII. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

MacKerricher SP is located in Mendocino County, on the northern California coast. The park is bounded on the west by the Pacific Ocean; its southern end adjoins the city limits of Fort Bragg. In the year 2000, approximately eight percent of the Mendocino County's total population resided in Fort Bragg. The city's population is expected to increase 24 percent from 2000 to 2020. According to the 2001 Interim County Population Projections from the California Department of Finance, the population for Mendocino County will reach 116,700 people in 2020, a 30-50% increase over current levels.

No residences are located in the project site. As a recreational facility, the development of permanent housing is not a planned use of the park. The park is both a local recreational resource and a destination park, used by locals and out-of-town visitors alike, but does not offer residential opportunities within its boundaries.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a) The proposed project would reconstruct the Laguna Point boardwalk. The project would have no housing component and all work would take place within the confines of the park boundaries, with no additions or changes to the existing local infrastructure. No impact.

b,c) As noted in XII(a) Discussion above, the project would have no housing component and would neither modify nor displace any existing housing nor displace anyone, either temporarily or permanently. No impact.

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XIII. PUBLIC SERVICES.

ENVIRONMENTAL SETTING

MacKerricher SP is bordered on the south by the City of Fort Bragg, on the north by the Ten Mile River, on the east by the Mendocino County unincorporated community of Cleone, and on the west by the Pacific Ocean. Emergency access to the project site is via State Route 1, a two-lane, state paved and maintained highway. The general area is urban/rural in nature; Fort Bragg has a population of just over 7,000.

State Park rangers are trained law enforcement officers and provide immediate police protection within the park boundaries, with backup provided by both the Fort Bragg Police and Mendocino County Sheriff's Departments. Both departments have stations within 10 miles of the proposed project site.

The California Shock Trauma Air Rescue (CALSTAR 4) service helicopters (Bell 222), based at Ukiah Municipal Airport, provide air ambulance service for Mendocino, Lake, Humboldt, and Sonoma counties, and is available for medical emergencies, search and rescue, and fire support 24 hours a day, 7 days a week. Response time is generally under 30 minutes. The Mendocino Coast District Hospital, located in Fort Bragg, approximately five miles south of the project site, is the closest full-service medical facility to the project site.

Fire protection is provided by the California Department of Forestry and Fire Protection (CDF), as outlined in a Cooperative Fire Protection Agreement with DPR. They are supported by the Mendocino Fire Protection Department and the Fort Bragg Fire Department, as necessary. The CDF Fort Bragg Fire Station is within 10 miles of the project site. Additional reinforcements are available from the Parlin Fork Conservation Camp (California Department of Corrections). CDF also maintains an Air Attack Base at the Ukiah Municipal Airport (approximately 65 miles and 15-20 minutes flight time away). The CDF Helitack Base is located in Willits, about 45 miles to the east of Mendocino.

MacKerricher SP is in the Fort Bragg School District. There are no existing or proposed schools within one-quarter mile of the Laguna Point boardwalk.

There are five state parks and the Point Cabrillo Light Station and Preserve within 15 miles of the boardwalk. There are no facilities, other than a parking area to the north, associated with the boardwalk. MacKerricher SP, including the boardwalk and surrounding area, is owned and operated by California State Parks.

Most Mendocino County offices are in Ukiah, although several departments, including the Department of Planning and Building Services, maintain a satellite office in Fort Bragg. There are no other public facilities, other than the state highway, in the vicinity of the proposed project area.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☒	☐
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

DISCUSSION

a) The proposed project is intended to reconstruct the Laguna Point boardwalk, with improvements ADA accessibility. No new structures would be added, and the reconstruction work and alterations associated with this project would not significantly increase visitation or the demand for public services. Implementation of the mitigation measures proposed in this document would reduce any potential adverse environmental impacts associated with the rehabilitation or alteration of this structure to a less than significant level.

Work associated with this project would be confined to the boardwalk itself and the areas immediately adjacent to the structure. There is limited vegetation and the potential for wildfire would not be significantly greater than currently present. The demand for fire protection services is not expected to increase during or following construction. Any construction work has the potential for injury and could require emergency rescue or medical assistance. However, this demand is no greater than present at any other construction project in the area and would not require an increase in emergency personnel, either temporarily or permanently. The accessible boardwalk would be designed to meet all accessibility and public safety requirements, including ADA-compliant decking and safety curbs. Demand for services would be equivalent to current calls for beach rescues, stranded climbers on cliffs, and other infrequent recreational injuries associated with improper and unauthorized activities. Less than significant impact.

As noted in the Environmental Setting above, State Park Rangers provide law enforcement protection with MacKerricher SP. No element of the proposed project would create a situation that would significantly increase the demand for police protection, increase staffing needs, or adversely affect emergency response times. No impact.

None of the project elements, during construction or operation of the facilities, would interrupt normal activities at MacKerricher SP or contribute to a significant increase in visitation. The level of required services within the park is expected to remain relatively static, subject only to annual fluctuations in visitor use. No impact.

County administrative requirements would be equivalent to any other minor commercial construction project. The proposed project has no unique properties and would have no significant impact on other public services. No impact.

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XIV. RECREATION.

ENVIRONMENTAL SETTING

MacKerricher SP is a semi-rural, coastal recreation area, emphasizing the importance of the marine and shore environments, sand dunes, marine terrace, wetland areas, geology, plant and animal life, and numerous cultural sites within and adjacent to the park. The purpose of the park is to make beach access and the rest of these features available, in an essentially natural condition, for visitor enjoyment, while protecting the resources for future generations.

More than half a million people enjoy MacKerricher SP annually. Visitation is heaviest during the summer months, but continues throughout the entire year. People come to the park for camping, picnicking, freshwater and surf fishing, beachcombing, nature observation, walking on the park's boardwalk, horseback riding, and hiking, biking, or jogging on the Coastal Trail (historic Haul Road).

There are five state parks and the Point Cabrillo Light Station and Preserve within 15 miles of the boardwalk. The proposed project area is within the boundaries of MacKerricher SP. There are no facilities, other than a parking area to the north, associated with the boardwalk.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

DISCUSSION

a) The proposed project would reconstruct the existing Laguna Point boardwalk and accommodate ADA access. Work for this project consists primarily of reconstruction of an existing structure and is designed to meet the needs of existing park visitors, rather than the expansion of facilities to encourage increased usage of this or other facilities. Less than significant impact.

b) As noted in Discussion XIV(a) above, the proposed project would reconstruct an existing facility. Less than significant impact.

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XV. TRANSPORTATION/TRAFFIC.

ENVIRONMENTAL SETTING

The Laguna Point boardwalk, site of the proposed project, is located in MacKerricher SP. This portion of northern California is somewhat isolated from the more heavily populated, central part of the state, with limited transportation routes and access into and through the area.

State Route 1, the Pacific Coast Highway, is designated as a Minor Arterial (MCGP - Circulation Element and Appendix B). It is a two-lane, state-maintained highway, with areas of three and four lanes, although none occur in the vicinity of the proposed project. Peak hour traffic operates at a level-of-service (LOS) C between the Fort Bragg North City Limits and Airport Road (approximately one mile from the proposed project site), with a significant increase in traffic volume inside the Fort Bragg city limits (Caltrans LOS Definitions, 2002). This is a designated truck route and vehicle traffic includes a significant number of trucks. Traffic volumes vary seasonally, with increased traffic and congestion in the spring and summer months. Bus traffic also increases during these months. State Route 1 runs north-south along this part of the Pacific Coast, paralleling the coast and the Park. State Route 1 is a designated National Scenic Byway.

Running parallel to State Route 1, inside the Park, is the historic Haul Road. It was originally part of the Union Lumber Company's Ten-Mile Logging Railroad, which was constructed in 1917 and converted to a road in 1949. The Railroad/Haul Road was used to transport logs and lumber by rail, and later by truck, to and from the Fort Bragg mills. It is also now known as the South MacKerricher Coastal Trail and is currently used as a pedestrian and bicycle trail.

There is an existing 80-vehicle parking area adjacent to the project, which typically might have less than 10 visitor vehicles using it during weekdays during the off-season, when project construction activities would take place.

Although, historically, there was significant rail traffic to and through Fort Bragg, that is no longer the case. There is no railroad line in the immediate vicinity of the project site, and the only operating line is the California Western Railroad and Navigation Company (California Western Railroad), which runs the Skunk Train, a shortline excursion. The Skunk Train provides roundtrip sightseeing tours but no regular passenger service. The rail company was originally called the Fort Bragg Railroad and operated as a logging line from Fort Bragg to Willits, with occasional passenger service for part of its operation. The rails extend roughly east-west, from the Fort Bragg coastal mill area, through town, then paralleling Pudding Creek as it moves eastward toward Willits. The active California Western Railroad line runs approximately two miles south of the proposed project location. There are no other rail lines within two miles of the site.

The Fort Bragg Airport is located approximately one mile south of the Laguna Point boardwalk. There are approximately nine single engine aircraft based at this privately owned airport; operations average 68 per month.

There is no regular bus service to the project site.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	☐	☐	☐	☒
d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

DISCUSSION

a) All construction activities associated with the project would occur within the boundaries of MacKerricher SP. None of the activities proposed as part of this project would have the potential to cause traffic delays on a public road. State Route 1 would be the primary access to the project site, with a turn into the parking lot to enter the project area. State Route 1 experiences traffic volumes of up to 11,000 vehicles daily. (Caltrans Traffic Volumes, 2002). The addition of a limited number of crew transport vehicles, delivery and equipment vehicles would not constitute a substantial increase in traffic volume for this road or result in additional congestion. In addition, work crews and equipment would typically arrive or leave the site outside the normal periods of congestion. Less than significant impact.

b) As noted in the Environmental Setting above, State Route 1 is the primary access route for this project location and generally operates at a level of service equivalent to an LOS-B, with occasional periods of LOS-C level congestion, although neither Caltrans nor Mendocino County have officially established the highway standard for this area. The desired level of service is LOS-C45 (Caltrans LOS Definitions, 2002; MCGP Circulation Element, pIII-4). As noted in Discussion XV(a) above, the limited number of construction-related vehicles visiting the site daily would not substantially increase traffic volume or

congestion on State Route 1, in the vicinity of the boardwalk. Less than significant impact.

c) The project site is not located within an airport land use plan, within two miles of a public airport, in the vicinity of a private air strip, and does not serve as a normal reporting point for air traffic in the area. Fort Bragg Airport, a private airport, is located approximately one mile south of the project site. However, nothing in the proposed project would in any way affect or change existing air traffic patterns in the area. Therefore, no impact would occur as a result of this project.

d) No portion of the project design or implementation would alter existing traffic conditions or add any element that would increase hazards to traffic or other forms of transportation. The project would reconstruct an existing structure that is not part of any existing transportation system. Decking and curbs would meet all state and local safety requirements and would be ADA-accessible. All proposed work and uses are consistent with the MacKerricher SP General Plan. Less than significant impact.

e) All construction activities associated with the project would occur within the boundaries of MacKerricher SP and work would not restrict access to or block any public road. All areas within the park would remain open to the public during construction, except for a restricted area at and immediately adjacent to the boardwalk. Minimum access requirements for emergency vehicles would be maintained at all times. Therefore, the impact of this project on emergency access or response would be less than significant.

f) As the project is replacing an existing facility, there is no projected increase in levels of visitation. Construction equipment and crew vehicles would occupy some of the existing parking spaces at the 80-space parking lot, which typically experiences usage less than 10 of percent capacity on weekdays during the off-season, when construction would take place. Therefore, the project would result in a less than significant impact.

g) There are no policies, plans, or programs supporting alternative transportation that apply to this project. No adverse impact.

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XVI. UTILITIES AND SERVICE SYSTEMS.

ENVIRONMENTAL SETTING

MacKerricher SP is a 2,300-acre coastal recreation area that borders the City of Fort Bragg to the south. Sewage for the park is processed via tight line from the park to the City of Fort Bragg. The underground line runs down on the west side of the MacKerricher Coastal Trail, extends under the trail and adjacent Beachcomber Motel property, then follows State Route 1 south to the Fort Bragg lift station. The sewer lift station is situated east of the Park, on the edge of the Caltrans right of way that parallels Pudding Creek. Solid waste disposal service is provided under contract with Waste Management of Fort Bragg. Electrical power is obtained from Pacific Gas and Electric. The park supplies and treats its own water from Lake Cleone, less than a mile north of the boardwalk. There is a public restroom approximately 1,000 yards from the construction site. There are no other utilities at the project site.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities?	☐ Yes	☒ No		
Would the construction of these facilities cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	☐ Yes	☒ No		
Would the construction of these facilities cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations as they relate to solid waste?	☐	☐	☐	☒

DISCUSSION

a) MacKerricher SP is within the jurisdiction of the North Coast Regional Water Quality Control District (NCRWQCD). The project would be in compliance with all applicable water quality standards and waste discharge requirements. (See Mitigation Measure HAZMAT-1 regarding potential impacts from accidents, spills, or upset). No impact.

b) As noted in the Environmental Setting above, water for the park is supplied from DPR-owned private water supplies. The proposed project would not result in the expansion of the existing internal plumbing or wastewater lines and would have no impact on public wastewater treatment facilities. A public restroom is located approximately 1,000 yards from the project site and will be used by construction crews. Any changes in water usage would be negligible and usage levels would return to normal following construction completion. No impact.

c) The project is limited to reconstruction of the boardwalk and its entrance area, with little change in existing drainage patterns. This project would not create or contribute to runoff water that would exceed the capacity of existing or planned storm water drainage systems. No impact.

d) As indicated in the Environmental Setting above, potable water is supplied for both the project site, and the park in general, from DPR-owned private water supplies. Current supplies are adequate for existing demands, the minimal additional demands associated with the proposed construction, and projected future use. Less than significant impact.

e,f) Wastewater treatment is provided by the City of Fort Bragg. Waste Management of Fort Bragg provides solid waste disposal services. The proposed work would not increase the park's wastewater or solid waste disposal needs, except as indicated in Discussion XVI(b) above. Less than significant impact.

g) The proposed work does not have a solid waste component. No impact.

CHAPTER 4
MANDATORY FINDINGS OF SIGNIFICANCE

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?	☐	☒	☐	☐
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
c) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?)	☐	☐	☐	☒
d) Have environmental effects that would cause substantial adverse effects on humans, either directly or indirectly?	☐	☒	☐	☐

DISCUSSION

a) The proposed project was evaluated for potential significant adverse impacts to the natural environment and its plant and animal communities. The project site may support certain special status plants. It has been determined that the project would have the potential to degrade the quality of the potential nesting habitat for the purple martin and sensitive raptor and bat species and reduce the number or restrict the range of rare or endangered plants (Howell's spineflower, short-leaved evax, North Coast phacelia, and Blasdale's bent grass) as well as impact coastal terrace prairie wetland habitat. However, full implementation of all mitigation measures incorporated into this project would reduce those impacts, both individually and cumulatively, to a less than significant level.

b) The proposed project was evaluated for potential significant adverse impacts to the cultural resources of Laguna Point and its immediate environs. It has been determined that activities associated with the proposed project would have the potential to cause a significant adverse impact on archaeological resources during earth-disturbing project activities. However, full implementation of all mitigation measures incorporated into this project would reduce those impacts, both individually and cumulatively, to a less than significant level.

c) DPR often has maintenance programs and rehabilitation projects planned for a park unit. At MacKerricher SP, this includes proposed construction of a 150-foot-long boardwalk, to connect the Trail Access parking area with the South MacKerricher Coastal Trail, on the northeast side of the Pudding Creek Trestle; rehabilitate the trestle, including the installation of decking and safety railings to accommodate public access onto the trestle deck, and open the trestle to the public; development and implementation of a Snowy Plover Recovery Program; a request to the City of Fort Bragg for re-zoning of Glass Beach, which was recently acquired by DPR and incorporated into MacKerricher SP; and upgrading or replacing an existing drinking water treatment facility at Lake Cleone. (For more information, please refer to Section 2.10 in Chapter 2 of this document.) Impacts from these projects, along with other environmental issues addressed in this evaluation, would not overlap in such a way as to result in cumulative impacts that are greater than the sum of its parts. Full implementation of all mitigation measures incorporated into this project would reduce all impacts to a less than significant level.

d) Most project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from construction emissions (Air Quality) and construction accidents and fire (Hazards and Hazardous Waste), though temporary in nature, have the potential to result in significant adverse effects on humans. These potentially significant adverse impacts would be reduced to a less than significant level if all mitigation measures incorporated into this project are fully implemented.

CHAPTER 5
SUMMARY OF MITIGATION MEASURES

The following mitigation measures would be implemented by DPR as part of the Laguna Point Boardwalk Reconstruction Project.

MITIGATION MEASURE AIR-1

- All active construction areas would be watered at least twice daily during dry, dusty conditions.
- All trucks hauling soil, sand, or other loose materials on public roads would be covered or required to maintain at least two feet of freeboard.
- All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Excavation and grading activities would be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads.

MITIGATION MEASURE BIO-1 (PURPLE MARTIN)

- A survey for nesting purple martins will be conducted within the project area every two weeks until mid-June by a DPR qualified biologist.
- If purple martins are found nesting within a designated buffer zone as determined by a qualified biologist or resource ecologist, project construction will not occur in that buffer zone during the nesting season of March through August.

MITIGATION MEASURE BIO-2 (SENSITIVE BAT SPECIES)

- A survey for suitable habitat (e.g., hollows in trees or snags) for void-roosting sensitive bat species (Townsend's big-eared and pallid bats) within 100 feet of the Laguna Point boardwalk project area will be conducted prior to project construction.
- If sensitive bat species are found within the project area, project construction will not occur during the roosting season: May 1 through August 30.

MITIGATION MEASURE BIO-3 (RAPTORS)

- A focused survey for raptor nests will be conducted by a DPR-qualified resource ecologist during the nesting season (February 1 to August 31) to identify active nests within 500 feet of the project area. The survey will be conducted no less than 14 days and no more than 30 days prior to the beginning of construction.
- If nesting raptors are found within 500 feet of the project area, no construction will occur during the active nesting season of February 1 to August 31, or until the young have fledged (as determined by a DPR-qualified resource ecologist).

MITIGATION MEASURE BIO-4 (SHORT-LEAVED EVAX, NORTH COAST PHACELIA, BLASDALE'S BENT GRASS)

- Occurrences of sensitive plant species within 25 feet of the project area will be located during the blooming period prior to project construction. The perimeter of these occurrences will be marked with flagging and construction monitors and work crews will be instructed to avoid these areas.
- Upon the conclusion of pre-construction monitoring, should impacts to any sensitive plant species be unavoidable due to constraints on the location of the boardwalk, construction in those sites (where the APE overlaps the plant population) will occur between August 1 and December 31, after seed set and before seedling germination.
- The boardwalk corridor will be shifted laterally to avoid permanent direct shading impacts to any sensitive plant species.
- Botanical monitors will be present during ground-disturbing construction-related activities to ensure minimal disturbance to sensitive plant occurrences.
- If complete avoidance of impacts to these plant species is not achieved, the effectively damaged or affected habitat area will be mitigated at a 3:1 ratio through habitat enhancement, or as determined appropriate after further consultation with appropriate resource agencies. Capture of propagules or salvage of individuals of these plant species will be included in habitat enhancement.
- An interpretive sign highlighting sensitive plant species at Laguna Point will be installed along the boardwalk after project construction.

MITIGATION MEASURE BIO-5 (HOWELL'S SPINEFLOWER)

- Occurrences of Howell's spineflower within 25 feet of the project area will be located during the blooming period prior to project construction. The perimeter of these occurrences will be marked with flagging and construction monitors and work crews will be instructed to avoid these areas.
- Upon the conclusion of pre-construction monitoring, should impacts to Howell's spineflower be unavoidable due to constraints on the location of the boardwalk, construction in those sites (where the APE overlaps the plant population) will be suspended and the U. S. Fish and Wildlife Service will be consulted to determine appropriate procedures for continuing construction and for mitigating impacts.

MITIGATION MEASURE BIO-5 (WETLANDS)

- Impacts to coastal terrace prairie wetland habitat as a result of shading from new boardwalk will be mitigated by enhancing or revegetating nearby coastal terrace prairie habitat, within MacKerricher State Park, in-kind at a 1:1 ratio (or as required by the Coastal Commission).

MITIGATION MEASURE CULT-1

- Excavation or ground-disturbing work associated with the installation of the concrete piers for construction of new boardwalk would be limited. To level the surface for the pier, the midden soil would only be excavated to no more than two inches below the surface where the soils have already been disturbed or by capping with imported fill material. Any excavation activities deeper than this designated depth would require approval from the DPR-qualified cultural resource specialist assigned to the project.
- Vehicle access and staging areas for the project would be restricted to those areas outside of the archaeological deposits. The DPR archaeologist assigned to the project

or park personnel familiar with the sites would designate the restricted areas prior to the start of construction activities.
- Changes in the footprint or construction techniques resulting in impacts outside the survey area would be reviewed and approved in advance by a DPR archaeologist. Additional surveys (a field inventory and pre-construction testing) would be conducted as necessary prior to the start of work.
- Vegetation clearing/removal necessary for construction activities would not be accomplished by pulling within the boundary of the archaeological deposits. Removal would consist of cutting to no more than two inches below ground level in those sensitive areas designated by the DPR archaeologist assigned to the project.

MITIGATION MEASURE CULT-2

- Handrails would be put along the boardwalk by the District where volunteer trails straying off the walkway are adversely impacting the archaeological deposits.
- The District would place jute netting and a layer of mulch over those sensitive areas being impacted by foot traffic straying off the boardwalk.
- These areas would be planted with native plant species to slow down coastal erosion and would discourage foot traffic in undesignated areas.
- Appropriate signage would be developed and installed by the District along strategic locations on the boardwalk. These signs would encourage park visitors to stay on official designated trails. Standard DPR issued signs with such messages as “Fragile Area” and “Area Closed for Plant Restoration” would be appropriate.
- Temporary protective fencing would be installed where the most eastern overlook deck was previously removed. This would discourage foot traffic across culturally sensitive areas and would allow the native vegetation to re-establish in this area.

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- Temporary protective fencing would be installed where the most eastern overlook deck was previously removed. This would discourage foot traffic across culturally sensitive areas and would allow the native vegetation to re-establish in this area.

MITIGATION MEASURE HAZMAT-1 SPILL PREVENTION

- All equipment will be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from park premises.
- Appropriate Best Management Practices (BMPs) from the California Stormwater Quality Association Stormwater Best Management Practice Handbook, Construction, Section 4, will be used, including WM-4 (Spill Prevention and Control) and NS-8, NS-9, and NS-10 (Vehicle and Equipment Cleaning, Fueling, and Maintenance). See Appendix E for BMP details.
- A Spill Prevention and Control Plan (SPC Plan) will be prepared prior to the start of construction and a spill kit maintained on-site throughout the duration of the project. This SPC Plan will include a map delineating construction staging or storage areas and areas where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of Fort Ross SHP during construction, workers will immediately notify the appropriate DPR staff (e.g. project manager or supervisor).
- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, soil, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized site.

MITIGATION MEASURE HAZMAT-2 FIRE MANAGEMENT

- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment.
- Construction crews will be required to park vehicles away from flammable material, such as dry grass and brush. At the end of each workday, heavy equipment will be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.

Mitigation Measure Hydro-1 – Water Quality

- Mitigation Measure Geo-1 will be implemented to provide Best Management Practices (BMPs) to control erosion and runoff during the construction phase.
- The project will be in compliance with all applicable water quality standards and waste

discharge requirements as specified in the NCRWQCB Basin Plan.

- Implementation of Mitigation Measure Hazmat-1 will mitigate for impacts to water quality from possible pollutants (fuels and other vehicle fluids) released from vehicles and or other equipment during construction.

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CHAPTER 6
REFERENCES

General

California Department of Parks and Recreation (DPR), 2003. Final Mitigated Negative Declaration, MacKerricher State Park, Mendocino County, California, Pudding Creek Trestle Rehabilitation Project, Ms. on file, Northern Service Center, California Department of Parks and Recreation, Sacramento.

California Department of Parks and Recreation (DPR), 1995. MacKerricher State Park General Plan. Ms. on file, Northern Service Center, California Department of Parks and Recreation, Sacramento.

California Environmental Resources Evaluation System (Ceres). Internet address: www.ceres.ca.gov

City of Fort Bragg Community Development Department, 2002. Fort Bragg General Plan. Ms. on file, Northern Service Center, California Department of Parks and Recreation, Sacramento.

Environmental Science Associates (ESA), 2003. MacKerricher State Park Traffic and Recreation Use Study. Ms. on file, Northern Service Center, California Department of Parks and Recreation, Sacramento.

Mendocino County Coastal Element (MCCE). Internet address: www.co.mendocino.ca.us/planning/CoastPlan/ContentIndexFrame.htm

Mendocino County General Plan (MCGP), 1981. Internet address: www.co.mendocino.ca.us/planning/GenPlan/GPContents.htm

Mendocino County Planning and Building Department, 2002. Mendocino County General Plan Update. Internet Address: www.co.mendocino.ca.us/planning/gpupdate

United States Geological Survey, 1960. Fort Bragg Quadrangle, California – Mendocino Co., 7.5 Minute Series (Topographic)

Aesthetics

California State Parks, MacKerricher State Park website. Internet Address: www.parks.ca.gov/default.asp?page_id=436

California State Parks, MacKerricher State Park Brochure, 2002. Internet Address: www.parks.ca.gov/pages/436/files/MacKerricherPark.pdf

California Department of Transportation (Caltrans), Scenic Highway System List of Routes. Internet Address: www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm

Agricultural Resources

California Department of Conservation, Farmland Mapping and Monitoring Program. Internet Address: www.consrv.ca.gov/dlrp/FMMP

Air Quality

California Air Resources Board (CARB), State and Federal Air Quality Standards. Internet Address: www.arb.ca.gov/desig/adm/adm.htm

CARB, State and National Area Designations Maps of California, August 2002. Internet Address: www.arb.ca.gov/desig/adm/adm/htm

CARB. *2002 California Almanac of Emissions and Air Quality*, May 2002.

CARB, *Ozone Transport: 2001 Report*, prepared by ARB Planning and Technical Support Division (Austin & Gouze), April 2001.

North Coast Unified Air Quality Management District (NCUAQMD), More About the North Coast Unified Air Quality Management District. Internet Address: www.northcoast.com/~ncuaqmd/moreabout.html

NCUAQMD, North Coast Air Quality Facts. Internet Address: www.northcoast.com/~ncuaqmd/documents/AIRFACTS.PDF

NCUAQMD, 1997. *Summary of Air Monitoring Data in the North Coast Unified Air Quality Management District*. Internet Address: www.northcoast.com/~ncuaqmd/documents/AIR97.PDF

Biological Resources

California Department of Fish and Game. 2004. California Natural Diversity Database. Sacramento, CA.

CNPS. 2004. On-line Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA.

Cooley, Gene. October 2002. California Department of Fish and Game. Personal communication.

EDAW, Inc. October 3, 2001. MacKerricher State Park 2001 Botanical Survey.

Hickman, James C., ed. 1996. The Jepson Manual: Higher Plants of California.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California.

Sawyer, J. and Keeler-Wolf, T. 1995. A Manual of California Vegetation. CNPS Press.

Cultural Resources

DPR, Cultural Resources Division. 2003. *A Guide to Sampling Endangered Coastal Archaeological Sites*. Kathleen Lindahl et al. Ms. on file, Northern Service Center, Californian Department of Parks and Recreation, Sacramento.

Schulz, Jeanette K. 1985. *Cultural Resource Report: Mackerricher State Park.* Ms. on file, Northern Service Center, California Department of Parks and Recreation, Sacramento.

Whatford, J. Charles. 1995. *In-Place Conservation and Stabilization Plan, Site CA-MEN-828, MacKerricher State Park, Mendociano County, California.* Ms on file, Northern Service Center, California Department of Parks and Recreation.

Whatford, J. Charles. 1997. *Archaeological Survey Report and Historic Study Report: Proposed Improvements to the Haul Road Coastal Trail, MacKerricher State Park, Mendocino County, California.* California Department of Parks and Recreation, Russian River/Mendocino District, Duncan Mills, California. Ms. on file, Northern Service Center, California Department of Parks and Recreation, Sacramento.

GEOLOGY AND SOILS

Klamath Resource Information System, 2003, The Effects of the 1906 Earthquake in Fort Bragg, website: www.krisweb.com/krisnoyo/krisdb/html/krisweb/noyo_background/1906quake.htm

Mendocino County, 2003a, Mendocino County General Plan Update, Background Report for the County of Mendocino General Plan Update, Chapter 8, Natural Environment, Section 8H, Geology and Seismicity, website address: www.co.mendocino.ca.us/planning/gpupdate/bkrpt/report.htm

Mendocino County, 2003b, Mendocino County General Plan Update, Background Report for the County of Mendocino General Plan Update, Chapter 9, Hazards, website address: www.co.mendocino.ca.us/planning/gpupdate/bkrpt/report.htm

Petersen, M. D., Bryant, W. A., Cramer, C. H., Cao, T., Reichle, M.S., Frankel, A. D., Lienkaemper, J. J., McCrory, P. A., and Schwartz, D. P., 1996, Probabilistic Seismic Hazard Assessment for the State of California, Division of Mines and Geology Open File Report 96-08; fault parameters on-line at: www.consrv.ca.gov/cgs/rghm/psha/ofr9608/

Petersen, M., Beeby, D., Bryant, W., Cao, C., Cramer, C., Davis, J., Reichle, M., Saucedo, G., Tan, S., Taylor, G., Toppozada, T., Treiman, J., Wills, C., 1999, Seismic Shaking Hazard Maps of California, Map Sheet 48.

Jennings, C. W., 1994, Fault Activity Map of California and Adjacent Areas with Locations and Ages of Recent Volcanic Eruptions, California Division of Mines and Geology (now the California Geological Survey).

USDA, 2001, Soil Survey of Mendocino County, California, Western Part, website: http://www.ca.nrcs.usda.gov/mlra/wmendo/

Vaughan, Patrick, 2003, Coastal Erosion in the Vicinity of Laguna Point, MacKerricher State Park, memorandum to Park Superintendent Ron Munson, dated October 16, 2003.

Hazards and Hazardous Materials

Mapquest, 2004. Internet address: www.mapquest.com

Hydrology and Water Quality

Archambault, Laurie, 2002, Final Report, Wetlands Delineations and Waters of the United States for Pudding Creek Trestle Rehabilitation Project, Pudding Creek Bicycle Boardwalk Project, and Laguna Point Boardwalk Project at MacKerricher State Park.

Federal Emergency Management Agency (FEMA), 2003, Flood Hazard Maps. Internet Address: www.esri.com/hazards

Mendocino County, 1981b, Mendocino County General Plan, Part V., Seismic Safety Element. Internet address: www.co.mendocino.ca.us/planning/GenPlan/Seismic/Contents.htm

Mendocino County, 2003, MCGP Update, Background Report. Internet Address: www.co.mendocino.ca.us/planning/gpupdate/index.htm

North Coast Regional Water Quality Control Board (NCRWQCB), 1994, Water Quality Control Plan for the North Coast Region (Basin Plan).

Warner, Peter J., 2004, Laguna Point Boardwalk Natural and Cultural Resources Mitigation Plan (attached as an Appendix to this MND document).

Land Use and Planning; Public Services; Utilities and Service Systems

About Fort Bragg Fire Department website, 2003. Internet address: www.fortbraggfire.com/about.htm

California Department of Forestry (CDF) – Cooperative Fire Protection Agreements. Internet Address: www.fire.ca.gov/fireemergencyresponse/cooperativeefforts/agreements.asp

California Shock Trauma Air Rescue (CALSTAR) informational website, Ukiah - CS4. Internet address: www.calstar.org/cs4_ukiah.html

CDF, Location of Units, Fire Stations, Helitack Base, Air Attack Base, and Conservation Camp serving Point Cabrillo Light Station and Preserve, September 2003. Internet address: www.fire.ca.gov/MiscDocuments/CDFContacts.asp

City of Fort Bragg, Business To Government website. Internet Address: www.b2gsource.com/frame.asp?d=http%3A%2F%2Fci%2Efort%2Dbragg%2Eca%2Eus%2F&m=Fort+Bragg++&r=http%3A%2F%2Fwww%2Eb2gsource%2Ecom%2Flinks%2F

state%2Easp%3Fstate%3DCA

Coastal Valleys Regional Emergency Medical Services (EMS) Agency, List of Mendocino County Fire Departments, Ambulance Providers, and Hospitals w/links, September 2003. Internet address: www.sonoma-county.org/cvrems/mendocino.htm

DPR, MacKerricher SP General Plan (1995), Land Use Element, pp 97-112.

Environmental Science Associates (ESA), 2003*. MacKerricher State Park Final Traffic and Recreation Use Study* (for California State Parks); ms. on file, NSC.

Environmental Systems Research Institute, Inc. (ESRI), 2003. Hazard Information and Awareness website; On-Line Hazards Maps (FEMA), August 2003. Internet address: www.esri.com/hazards

Grand Jury Review of Police and Fire Protection Services in the City of Fort Bragg, 2000-01. Internet Address: www.co.mendocino.ca.us/grandjury/00-01/07-City%20of%20Fort%20Bragg%20Police%20and%20Fire%20Protection.pdf

MCGP, Land Use Element. Internet Address: www.co.mendocino.ca.us/planning/GenPlan/LandUse/Contents.htm

Mendocino Coast District Hospital informational website. Internet address: www.mcdh.org

Mendocino Community Resource Directory, Mendocino County Sheriff's Office website. Internet address: www.mendocinoresources.com/program/1830.html

Mendocino County Coastal Element, 1991.Internet Address: www.co.mendocino.ca.us/planning/CoastPlan/Chap3-8Narr.htm

Mendocino County Office of Education, Schools website: Mendocino Unified School District; July 2003. Internet address: www.mcoe.k12.ca.us/schools/mendocino/index.shtml

Mendocino County Office of Education. 2003. Fort Bragg Unified School District; Listing of schools and links to websites; updated August 2003. Internet Address: www.mcoe.k12.ca.us/schools/fort_bragg/

Mendocino County Zoning Ordinance, Title 20. Internet Address: http://elib.cs.berkeley.edu/cgi-bin/doc_home?elib_id=2195

NCRWQCB, NPDES Stormwater Report Newsletter, Volume 1, July 2002. Internet address: www.swrcb.ca.gov/rwqcb1/programs/npdesstorm.html

North Coast Regional Water Quality Control Board website. Internet Address: www.swrcb.ca.gov/rwqcb1/maps.html

Mineral Resources

Mendocino County, 2003a, Mendocino County General Plan Update, Background Report for the County of Mendocino General Plan Update, Chapter 8, Natural Environment, Section 8F, Mineral Resources, website address: www.co.mendocino.ca.us/planning/gpupdate/bkrpt/report.htm.

Noise

MCGP, Noise Element, 1981. Internet address: www.co.mendocino.ca.us/planning/GenPlan/Noise/Contents.htm

U.S. Environmental Protection, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, 1971.

Population and Housing

ESA, 2003. MacKerricher State Park Final Traffic and Recreation Use Study (for California State Parks); ms. on file, NSC.

MCGP, Housing Element, 1981. Internet address: www.co.mendocino.ca.us/planning/GenPlan/Housing/Contents.htm

State of California, Department of Finance, Interim County Population Projections. Sacramento, California, June 2001.

U.S. Census Bureau. Census 2000 - Profiles of General Demographic Characteristics; 2000 Census of Population and Housing (California), May 2001. Internet search March 16, 2003. Internet address: www.census.gov/prod/cen2000/dp1/2kh06.pdf

Recreation

DPR, MacKerricher State Park Visitor's Brochure. Internet Address: www.parks.ca.gov/pages/436/files/MacKerricherPark.pdf

California Department of Transportation (Caltrans), District 1. Listing of State and National Parks in District 1, September 2001. Internet address: www.dot.ca.gov/dist1/d1stateparks.htm

ESA, 2003*. MacKerricher State Park Final Traffic and Recreation Use Study* (for California State Parks); ms. on file, NSC.

MCGP, Recreation Element. Internet address: www.co.mendocino.ca.us/planning/GenPlan/ScenicHwy/Contents.htm

Ten Mile Coastal Trail Foundation, Ten Mile Coastal Trail History webpage. Internet Address: www.mcn.org/1/10milecoastaltrail/history.htm

Transportation and Traffic

Caltrans - District 1 informational website. Internet address: www.dot.ca.gov/dist1/index.htm

Caltrans, California Scenic Highway Program, 2001. Internet address:

www.dot.ca.gov/LandArch/scenichighways

Caltrans, Traffic Volumes on the California State Highway System - Route 1 (2002). Prepared by the Traffic and Vehicle Data Systems Unit. Internet address: www.dot.ca.gov/hq/traffops/saferesr/trafdata/2002all/r001i.htm

MCGP, Circulation Element. Internet address: www.co.mendocino.ca.us/planning/GenPlan/Circulation/Contents.htm

MCGP, Scenic Highways Element. Internet address: www.co.mendocino.ca.us/planning/GenPlan/ScenicHwy/Contents.htm

National Scenic Byways Program, Pacific Coast Highway - California's Route 1 website. Internet address: www.byways.org/travel/byway.html?CX_BYWAY=12744&

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